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COMPULSORY PEACETIME MILITARY TRAINING

Report of the Educational Policies Commission

CONGRESS is now considering legislation which, if enacted, would require all able-bodied young men on attaining the age of 18, or within four years therefore, to be inducted into the Army or Navy and to devote one continuous year to military training.

Is the enactment at this time of compulsory peacetime military training necessary for national security?

Is compulsory peacetime military training necessary or desirable in order to improve the education of the American people?

Much unnecessary confusion can be avoided if these two aspects of the question are clearly distinguished and separately considered.

I. National security.—The proposal to adopt compulsory military training is related to many matters which are outside the special competence of military leaders. The choice between a policy of national security based on international agreements and backed by an international police force, on the one hand, and a policy based on the attempt to maintain at all times an overwhelming national military might, on the other, is not primarily a professional question of military operations or military strategy. It is rather an issue of broad public policy which, under the American system of government, should be considered and decided by all citizens, including the professional military experts as well as civilian laymen.

If it could be clearly shown that the enactment at this moment of the proposed legislation is a military necessity for national security, then this legislation would command and receive our prompt support—and that of every other loyal citizen. However, we have encountered no convincing evidence of such immediate necessity.

Clearly, the security of the nation in *this* war does not require the enactment of such legislation at this time. Under the selective service and training laws the needs of the armed forces can be supplied to the very limit of the nation's manpower resources. These laws should be and will be continued in full effect until the last of our enemies has surrendered.

If an effective international security system is put in operation, the necessity for universal military service will be removed. On the

other hand, if by some misfortune no such international system is established, Congress will then be able to legislate in the light of a much more complete knowledge of world conditions than can now be available. Such legislation as may then be seen to be clearly necessary should be fully supported by educators and all other citizens.

To identify national security solely or even mainly with a system of one year of military training is a dangerous error. Even if we exclude from consideration for the moment the possibility of international cooperation to promote national security, national preparedness clearly involves such important and varied subjects as industrial productivity, scientific research and invention, stockpiles of strategic materials, a sound foreign policy skilfully executed, an alert military intelligence service, and the general health and efficiency of the population.

Basic to the successful management of all of these matters is a continuously informed and active public opinion. Lacking public understanding and support, no system of national security can be effective whether that system rests on compulsory military training alone or on a wider basis. The most serious source of insecurity for the United States has not been a lack of men trained in military technique, but rather a lack of a substantial body of well informed public opinion willing and able to face the facts of the international scene and far-sighted enough to adopt and enforce economic, social, and political policies which would check the rise of aggressive power.

Security for this nation is not to be had at any easy price or as the result of legislative majorities and expedients. There is no bargain counter for liberty; its price is still eternal vigilance.

Those who most vigorously press for immediate action by Congress give two main reasons for their impatience. It is said: (*a*) that a compulsory military training law will increase American influence at the peace table, and (*b*) that the law can be enacted only while the American people are mentally and physically involved in the conduct of a war.

The latter position reveals either a profound distrust of the reasoned judgment of the American people or a fear that the entire case for universal peacetime military training cannot withstand an objective and calm review.

Furthermore, what Congress enacts Congress can repeal. If, in times of peace, the American people would prevent the enactment of compulsory military training, they would presumably repeal it if it were already on the statute books. Such a chain of events would in the long run leave the nation in a weaker military position than if the law had never been passed at all.

We all want our country to exert a strong and constructive influence in building with other nations, "a general international organization . . . for the maintenance of international peace and security." To the purpose thus stated, we already stand committed by the Four-Power Declaration at Moscow and by Senate Resolution 192 (the "Connally" resolution). The best way further to implement that purpose is for the Congress and the Executive to continue to commit this nation to full participation in a cooperative international program to win and keep the peace.

A veiled threat consisting of a new commitment to compulsory universal peacetime military training is hardly the best equipment for a peace conference, and it is a particularly inappropriate device for a nation which has recently shown that it can quickly become a military power of incomparable strength. Our position at the peace table would also be strengthened if we would urge other nations to reduce or abandon their programs of compulsory military training, and thus begin to provide those "practicable measures which will lighten for peaceloving people the crushing burden of armaments" that are promised in the Atlantic Charter and endorsed by each of the United Nations.

Among all the uncertainties of the future, we can be very sure of one thing at least. The Axis nations are to be occupied and deprived of the power to make war. Do we then fear a sudden and unprovoked attack from some new direction? The complex preparations of the vast industrial apparatus of modern war cannot be made either secretly or quickly. Pearl Harbor was attacked by treachery and surprise, but the fact that Japanese policy was headed for war with this country was no surprise to our diplomatic missions abroad and need have been no surprise to even moderately well informed Americans. If predatory nations should develop in the future, we shall have years of warning of their intentions. If we use our eyes and our heads we shall have ample time to take counter measures either through some international agency or independently.

National security is made up of many elements which must be seen as a whole and planned as a whole. Such over-all planning and action is clearly impossible at the present time because of uncertainties which only the lifting of military secrecy requirements or the unrolling of future events can clarify.

II. Educational requirements.—Even those who will admit that enactment now of compulsory peacetime military training cannot be solidly justified on security grounds may still insist that a year of military training is an inherently desirable experience, which should form a required part of the education of all American men. From this point

of view, the values most often claimed for universal military service and training are (*a*) health and physical fitness; (*b*) loyal, disciplined, and patriotic citizenship; and (*c*) vocational training.

This is an exceedingly attractive list of purposes. The question is, however, not whether these are worthy aims for American education but whether military training is the best way to attain them.

It is often argued that universal peacetime military training would be a good way to increase substantially the physical fitness of the nation. Wholesome food, vigorous exercise, and outdoor activity usually accompany military life. But a year of army life is not a guarantee of lasting health and fitness and no evidence has been produced to show that discharged soldiers live longer or have less illness than men without military training. More important, a year of military training cannot overcome years of inadequate health education, bad health practices, and poor environment. We must start long before the eighteenth or twenty-first birthday and we must use methods very different from the army regime if we really want to build a healthy nation.

By suitable federal legislation, a national health program could easily be the most important single manpower factor in a comprehensive plan for national preparedness. By such action this country could achieve a mental and physical fitness effective in the pursuits of peace as well as for the possible requirements of war.

Finally, any effort to make a case for compulsory military service on health grounds is forced to face the fact that it ignores considerably more than half the population since it would provide no health service or education for women, for men rejected because their physical capacities are already seriously deficient, or for men discharged because their health is impaired during military service.

"To each social order or faith, to democracy no less than dictatorship, there is an appropriate discipline. *Moreover, the discipline which sustains the one will tend to destroy the other.*" The astounding physical and mental readiness with which American boys have quickly accepted and intelligently applied the necessary military disciplines, when the need arose, is widely acclaimed as a direct result of our American tradition of selfdiscipline and individual responsibility. This demonstration of selfdiscipline stands out in sharp contrast to the attitude and character of the European conscript.

There is little substantial evidence that delinquents and recalcitrants are fundamentally or even temporarily changed by military discipline. The wartime record of our youth does not indicate any necessity for a new military system of civic education in this country.

Our soldiers have been, to say the very least, fully as effective, patriotic, and loyal as have the German and Japanese youth who have never known anything but a regime of compulsory military training.

It is true that men in the Army may learn such vocational skills as those of mechanics and carpentry, as well as more specific military lessons. So far as these incidentally learned vocational skills are of value to the soldier when he reenters civil life, the vocational education program of the Army is useful and praiseworthy.

Compared with the vocational training that is possible under good civilian auspices, however, the military variety necessarily suffers by comparison. For one thing, many military occupations have no close counterpart in civilian life, or they may require more men than civil life can absorb in this same occupation. The necessity of reaching a specific operational skill with the utmost speed, because of the limited training period, will often demand a degree of overspecialization which is likely to prove ineffective for peacetime carryover. Finally, in the Army, personal choice and aptitude for a particular vocation are necessarily subordinated to the military efficiency of the unit.

Given a fraction of the money which a year of military service would require, the schools and colleges could do a far better job of vocational guidance and training for peaceful civilian pursuits than could the Army.

These statements should not be interpreted as a sign of professional complacency with our present system of education. That system suffers from some serious shortcomings, but from none which cannot be remedied by forms of public action far less drastic and costly than that required for a year of compulsory military training. What the schools and colleges need, and how those needs may be met, have been pointed out repeatedly by the teaching profession. More recently the profession has drafted and published comprehensive plans for the education of all American youth. If put into prompt effect, these plans can make the nation strong and well educated and yet avoid the perils which would inevitably accompany a system of universal military training in peacetime.

[*Reported from* Compulsory Peacetime Military Training, *a statement of the Educational Policies Commission appointed by the National Education Association and the American Association of School Administrators. Washington: The Commission, February, 1945, 15 pp.*]

DEMOCRATIC SCHOOL ADMINISTRATION

VIRGIL M. ROGERS

In School Management

THERE is increasing interest in the experimentation now in progress in various school systems over the country in the area of democratic school administration. In almost every size school system one may find evidences of some phase of cooperative educational administration being tried out with varying degrees of success. Where the attempt has apparently succeeded there is usually considerable praise-singing of the procedure; and, on the contrary, where the administrator has failed in his leadership, whatever the cause, usually his attitude toward cooperative educational administration is one of hostility. Unfortunately, the practice is condemned as ineffective and unsuccessful without regard to the conditions under which it was tried out and without reference to the qualifications of the local administrative leadership.

The authors of the Twenty-Eighth Yearbook of the National Society of College Teachers of Education point out that, "The ideal of democratic deliberation is an intelligent and uncoerced consensus concerning what should be done. It is this full utilization of human resources in the guidance of common action that justifies the democrat's faith that democratic cooperation leads to policies and programs which are more relevant to existing conditions, more sensitive to all human values, more generally satisfying to the man concerned, and more enduring than policies and programs based on any other mode of social cooperation." It is in this spirit and with this point of view that the work in the River Forest schools is being carried on.

The Village of River Forest, with a population of 10,000, is a wealthy suburban residential village, seven miles west of Chicago's Loop. The village is a community of homes from which the children come to the public schools rather than attend private schools. The attitude of the taxpayers is that they are willing to pay the price for schools as well staffed, as fully equipped, and as sanely progressive as any of the better private schools, and an intense loyalty to this school system has developed.

There has been an active group of Parent-Teacher Associations in the schools for several years; however, the full potentiality of these groups was not utilized in the educational program of the community until recently. Recognizing the need for a representative body of professional and lay citizens from the community to meet periodically and consider with the administration the educational problems, plants, and needs as they relate to the public schools, the superintendent in-

vited the officers of the Parent-Teacher Associations, the Mothers' Council, the principals, and the president of the Teachers' Association to come together for the purpose of discussing ways of organizing for effective action. The outcome was the establishment, with a constitution, of the Educational Advisory Council of the River Forest Public Schools, which has been incorporated as a part of the community-wide parent-teacher organization, recognized by the Board of Education.

The group is composed primarily of democratically elected representatives of parents of children in the schools and of professional staff members including the president of the Teachers' Council.

The superintendent sits in as a member of the Council, but with no more authority than any other member. It is my belief that the Council is a much more effective instrument in educational administration when the chief administrative officer gives his complete support to the work of the Council but carefully avoids doing or saying anything which might discourage any council member from expressing his feelings or beliefs concerning the issue under consideration. He can with perfect propriety present problems, suggest areas of exploration and study, furnish insights into aspects of the educational organization with which he is more familiar than others, collect, analyze, and interpret educational data for the group, and even make concrete suggestions, point out fallacies, and tell the Council just what his considered judgments are on matters brought before the Council. In fact, experience has clearly indicated that one of the great values accruing from the Advisory Council is the atmosphere of complete freedom in the council chamber which invites critical evaluation and appraisal of the educational program as it is functioning, and the free and frank discussion of proposed changes or revision of educational policy. The Council has come to serve as a clearing house where all members are free to discuss and appraise the issues under consideration.

From the superintendent's viewpoint, one of the great values growing out of this type of council is the opportunity to discuss with the lay and professional groups many of the needs of the school system and to inform a dynamic group of citizens interested in the schools about the areas of educational planning which deserve careful exploration. Much that has been achieved in the form of progress in the local educational organization has come with little opposition, because informed and enthusiastic parent leaders have understood the proposals before they were translated into action by the Board of Education.

Below are listed some of the achievements of the Advisory Coun-

cil which have definitely affected educational policy in the River Forest Schools.

1. Establishment of a free nursery school.

2. Broadening of the budget to include equipment and supplies for adequate use of visual aids, radio, maps, and playground equipment.

3. Cooperative study of teacher tenure and general welfare legislation resulting in an excellent state and local system.

4. Establishment of a social security plan through joint contributions by employees and Board of Education for all nonteaching employees not covered by the teachers' retirement system.

5. Development of a school-owned textbook system, resulting in a great increase in the number and variety of classroom materials.

6. Joint employment of a Director of Recreation for the community, who also is head of the physical education program in the schools.

7. Development of the instrumental music department to include free private lessons on musical instruments for the first years and much more group work in the instrumental field.

8. Complete elimination of all formal marks and all report cards, and in place of these a comprehensive cumulative folder file for each child containing complete data on his progress through the grades.

9. An attack upon the dual system of public education in the state, the outcome of which will be determined in the critical years ahead.

10. Inauguration of parent education programs.

11. Revision of the teachers' salary schedule, making it the best in the state for schools of this type.

12. Joint study of the school's curriculum, resulting in the development of a modification program which has provided an accepted statement of educational philosophy and objectives.

In view of the grave responsibility which rests on the shoulders of all educational administrators, and in light of the world crisis which has so affected every educational institution, it would appear that cooperative educational administration should become increasingly popular with school administrators. The success of such activities in River Forest provides abundant evidence that a school system can move forward in its educational development even under the handicaps of depression years and in the midst of a war crisis.

[*Virgil M. Rogers is Superintendent of Schools, River Forest, Illinois. Reported from* School Management, *XIV (March, 1945), 231, 240-1*]

THE U. S. CONGRESS AND EDUCATION

B. P. Brodinsky

In the Educational Outlook

THERE is a notion abroad that educators are looking more and more toward Washington. Whether they are looking for leadership or merely for federal funds and support for specific measures is not quite clear. But certainly interest in what's going on on Capitol Hill is rising among schoolmen.

There is no evidence, however, of any trend to federalize education. Federal officials, as well as other Washington leaders in education working closely with Congress and the executive branch, are determined to strike down any move which threatens to create a dual system of public education or to centralize control, or to permit federal interference with the state and local school systems. Congress is especially vigilant in this respect. But having discharged that responsibility, there seems to be little else that Congress is disposed to do for public education. The rest of this article, therefore, is a story of frustration.

Only the citizen as "the economic man" seems to concern Congress when it legislates on educational problems at all. The great vocational education acts of the past generation testify to the vision Congress has exhibited on behalf of the economic welfare of the people. Over and above the $35,000,000 which the Congress earmarks each year for the "regular" vocational programs, it liberally appropriates additional millions for specialized vocational training. During 1942-43, for example, the Congress spent $186,000,000 on vocational training for war workers, engineering, science, management training, rural vocational training, etc. This concern for the vocational welfare of the people exhibits, on the obverse side, total disregard for anything smacking of liberal or general education.

The Constitution says nothing about either vocational or liberal education. And if Congress bases its vocational education acts on the general welfare clause, it might equally support the humanities on the same basis. It isn't the Constitution which guides the Congressional acts on education. It is rather Congressmen's own notions that culture is sissy stuff; that the humanities are the concern of a few starry-eyed individuals—not worthy of one federal dollar. Congress has yet to discover the seriousness of this fallacy. It has yet to recognize that the agricultural and mechanical arts have their roots in the humanities. If it were not for the great minds which concentrated on pure science, psychology, research, and even philosophy, we could not have the great agricultural experimental stations, so dear to the heart of Congressmen.

A disregard or unconcern for

children as a group is the second characteristic of our national Congress. The average Congressman is convinced that the individual home and parent can very well take care of its own. Even such nation-wide wildfires as exploitation of child labor, wartime juvenile delinquency, wholesale exodus of children from schools to war industries, and, indeed, the break-up of the public school system itself have been shied away from by Congress.

A long series of negative acts—some of them openly unfriendly to organized public education—must be laid to Congress by educators. The veterans' education program is a case in point. Nearly two years ago a committee of educators, headed by Brig. Gen. Frederick Osborn, began studying provisions for veterans' education. Their report was a thoughtful document. It took for granted that a large proportion of veterans will want short vocational courses to fit themselves for well-paying jobs and that Congress must make it possible for the exsoldiers to do so. But the Osborn Committee was properly more concerned with the educational deficiency created by the war. The nation's most intelligent and able students had interrupted their studies to go to war. The future's teachers, writers, scientists, doctors, artists, and public leaders were on the battlefield. These young people must somehow be brought back to school after the war, encouraged to pick up their studies, and made free of financial worries while attending school. The Osborn Committee therefore emphasized the importance of outlining an educational program under educator's control to meet the educational deficiency.

Although the Osborn Report went up to Congress and was made the basis for a bill, this wise proposal was soon lost in the Congressional maze. In its place emerged Title II of the G. I. Bill of Rights. Here was definitely not educational but veterans' legislation. The heart of the Osborn proposal was lost. Thus Congress saw fit to take out of the hands of educators what might have proved the most important educational venture of our time.

Other negative acts might be cited, outstanding of which is the strangling of the Thomas-Hill measure for federal aid to education. Even opponents of this measure admit that the bill was not considered on its merits, but was garrotted by what the *Washington Post* called "legislative trickery." A U. S. Office of Education school lunch measure was emasculated and tacked onto a Department of Agriculture marketing and distribution bill. The war child-care program for congested war areas and elsewhere, has never been placed by Congress where it belongs—in the hands of educators; instead, Congress made it a part of a public works program. During the last four years Congress has killed the

Office of Education radio division, which had begun to attract a popular following of adult listeners; killed the federal forum discussion project; disapproved funds for the High-School Victory Corps and for a physical fitness program, despite the fact that these activities had support among state and local educators.

The temper of Congress toward education is best shown each year when the U. S. Commissioner of Education goes on Capitol Hill to ask for his annual budget of $200,000—one of the smallest sums for any federal activity. Congress, which generally disparages statistics, suddenly finds a love for educational data and insists that that is what the Office of Education should spend its money on. Thus, recently one Congressman took Commissioner Studebaker to task for not having published statistics showing enrolments in English, Latin, French, history, biology, and algebra. The Congressman contended that such statistics had been published beginning in 1900 but that they suddenly stopped in 1928. When Mr. Studebaker objected that he did not have sufficient funds to carry on all the statistical studies he would like, the Congressman pointed out that the money which the Office of Education uses in publishing bulletins on international education might be used to collect statistics on enrolments. Even the blind could tell what the Congressman was after, but Mr. Studebaker put it in words: "I know that there are some people in the United States who would like to feel that the United States Office of Education should not do anything except collect statistics, and should not go further than that to develop or help develop education in the United States."

Some Congressmen honestly believe that by keeping federal educational agencies weak they are making local educational systems strong. The fallacy is obvious.

But while some few Congressmen are sincere in their attitudes, the majority see no reason why they should do anything on behalf of public education. Statistics of educational deficiencies, or low teacher salaries, or arguments for better types of education do not impress them. The professional representatives of education who appear before Congressmen year after year asking for special favors do not impress them either. And the only thing that would impress Congress —interest and pressure from back home— are lacking when Congress debates or considers educational measures.

[*B. P. Brodinsky is the Washington correspondent of the Educational Press Association of America. Reported from the* Educational Outlook, *XIX (January, 1945), 1-6.*]

JUST HOW CATHOLIC ARE OUR SCHOOLS?

BROTHER EUGENE A. PAULIN, S.M.

In the Catholic Educational Review

"EVERY Catholic child in a Catholic school" is the slogan for Catholic education furnished by the Third Plenary Council of Baltimore; and Pius XI furnished the ideal for a Catholic school: "To be a fit place for Catholic students, it is necessary that all the teaching and the whole organization of the school, and its teachers, syllabuses, and textbooks in every branch be regulated by the Christian spirit."

Rev. Thomas Coakley makes the following indictment in this regard: "It is almost a truism to say that we have no genuine Catholic schools in this country. . . . The trend in our Catholic schools for the past generation has been more and more to ape the methods, the curriculum, the standards, the textbooks and the credits of public-school education, until our Catholic schools have almost been drained of their supernatural content. Every fresh so-called enrichment of the curriculum has resulted in the impoverishment of the Catholic atmosphere of our schools."

We do not seem to realize that we have at our command many methods and procedures infinitely superior to those in use in nonCatholic schools. Take for example the matter of guidance, moral guidance in the general sense. What can equal the system set up by the Catholic Church? Positive principles of conduct outlined in our religious instructions and sermons, sympathetic advice from teachers, inspiration from the Divine Model and His imitators the Saints, individual counsel in the confessional, and above all divine assistance assured by the sacraments. What have nonCatholics that is in any way comparable to this?

In a conversation with a professor of psychology at one of our foremost universities, I asked him whether he realized the great value of confession from the point of view of mental hygiene, since the properly disposed penitent not only receives relief afforded by sharing his troubles with a sympathetic listener, but also has the assurance of the forgiveness of his sins. The professor admitted that he had never looked at it in that light and asked whether priests were educated along those lines. I assured him that casuistry was their profession and that they went through years of training aimed particularly in that direction. And still we persist in aping the system in the public schools in which special officers in special offices, with their mumbo-jumbo of guidance jargon, attempt help which at best is a poor substitute for what is given us by the Catholic Church.

Other examples could be cited in which we slavishly follow the pattern set by nonCatholic schools.

Father Leen contends: "There is no excuse for Catholics blindly, unquestioningly, and without due corrections working a system of education imposed on them by those who do not hold their beliefs. Since the Catholic education of life is fundamentally different from that of those who are not of the True Church, the work of the Catholic educator must be different from that of the nonCatholic, and the whole system, tone, training, and objective of the Catholic school must be particularly distinctive and unlike other schools."

One way of emphasizing this distinctive character of our Catholic schools (and of making sure all of them are distinctive) would be to set up a Catholic accrediting agency —one with definite, pre-agreed-upon policies, thus forestalling the possibility of permitting "charity to cover a multitude of educational sins." We can never hope to establish the value of religious education to these other agencies. As Paul Douglas puts its flatly: "Until churchmen can demonstrate *with actual data* that the teaching of religion in the schools is vital to living in the twentieth-century world, there is no assurance that their interest in education extends beyond the point of making Protestants or Catholics, Fascists or Communists." This teaching of religion is the very purpose of our separate system of schools and we should prize this above all advantages that the purely secular schools can offer.

There are many who say it is entirely possible for us to remain with the accrediting agencies and still realize our purpose. Perhaps an insufficient number of us are aware of the unconscious, though nonetheless subtle and dangerous, secularizing influences presently exerted on our Catholic schools by secular accrediting agencies. Experience has shown that we yield in the direction in which most pressure is exerted.

Until such time, however, as we are able to set up a vigorously Catholic accrediting agency, influencing Catholic schools in the direction of the true ideal, it is the duty of teachers in our Catholic schools to react strenuously against secularizing tendencies and to renew daily their consecration to the great cause of a *truly Catholic* education.

Brother Eugene A. Paulin, S. M., is Inspector of Schools, Society of Mary, Maryhurst Normal, Kirkwood, Missouri. Reported from the Catholic Educational Review, *XLIII (February, 1945), 88-93.*

WHY THE ATTACK ON PROGRESSIVE SCHOOLS?

Roy W. Morrison

In North Carolina Education

CRITICISM of the school in the guise of attacks on "progressive education" has recently reached almost the proportions of an organized campaign. It is found in the newspapers large and small. It permeates the popular magazines. Nearly all of them make, or imply the assumptions: (1) that "Progressive Education" is characterized by unrestrained, unorganized freedom of the child to do as he pleases, by disuse of organized, worthwhile materials, by neglect of useful information, disciplined skills, and socially controlled, acceptable behavior; and (2) that the schools, have "gone progressive."

Can there be a connection between these indictments of the public schools and the current demands for retrenchment and the curtailing of public expenditures? Certainly school budgets can be curtailed with less of popular opposition than can those of most other public services and institutions. And certainly one sure way to lessen popular opposition is to create doubt in the soundness of the public school program. Some of the criticisms are probably the thinking of those who are opposed to change. Others may be based on inadequate, superficial observation or on unfortunate personal experience which isn't at all representative. Still others are, without question, inspired by fear that "progressive education" may encourage a questioning attitude toward social and economic conditions and an intelligent insistence on their improvement.

A great many other writers are questioning the schools honestly and are insistent on an honest answer to their questions. They are genuinely concerned that the educational returns shall be commensurate with the investment, and that we will be prepared to invest more only as we are prepared to use the increased funds in real improvement. They realize that it is the job of the public to question and to demand an accounting. They may have reason to think that without insistent, even harsh questioning, we school people will not take the time and the trouble really to evaluate the school program and its products.

The latter kind of inquiry must be welcomed and fearlessly faced, though it may mean an admission of weakness. If we would correct and redirect honest criticism, we should first examine the underlying assumptions. If we are to meet successfully the unfair attack we *must* examine these assumptions, for until these are exposed and their falsity clearly shown, we have little chance of answering convincingly the criticism based on them.

Nothing could be farther from the truth than the idea that a pro-

gressive classroom or school program is a "hand-to-mouth" educational existence without careful planning and direction. It is true that some teachers and schools have adopted "progressive education" as a fetish. They have no real philosophy. They frequently have no clear-cut notion of what they are trying to do or of where they are going. The things complained of are a natural outgrowth of such unsound conditions.

A progressive school, progressive education, if you please, is a school or a program of education in which the personnel is constantly and democratically trying to discover: (1) more about children and how children best develop into strong, happy, productive personalities; (2) what society, or its firsthand concrete example, the community, needs in its members—and what conditions, problems, and choices its members confront; and (3) what kind of experiences, activities, materials, methods of working with children, organized into a school program, will best enable the individual child to take his place in the community. The progressive school assumes that health, wholesome use of leisure time, social efficiency, and intellectual efficiency are equally important to the individual in family life, in the community, in industry, and in agriculture. It assumes that the characteristics in the individual which best assure these things should be developed by direct encouragement, guidance, and assistance, rather than by indirection. It assumes that these traits will best develop, will most likely be characteristic of the individual, will most likely prove effective in the individual's behavior, when they are developed in situations most like those in which they are useful outside as well as inside the school, when they grow out of the use of materials, activities, choices, problems most personally and socially valuable outside as well as inside the classroom. Broadly conceived, carefully guided, this type of program will not only *not* neglect the past and the things of the past which are valuable in our culture, it *will actually use them more extensively and more effectively,* since the individual pupil will need to *understand* the culture in order to be able to use it.

It is reasonable to assume that many of the criticisms aimed at progressive education might better be aimed: (1) at a fragmented program, traditionally conceived, which does not challenge youth; (2) at overcrowded classrooms in which things cannot be done on the basis described above; and (3) at a teacher wage which cannot attract into the classroom large numbers of young persons with the personal and social qualifications to teach youth on such terms.

Have our schools "gone progressive"? Examine the texts which have been adopted in our schools. Examine the buildings and equip-

ment, the instructional supplies that are purchased for the children, the courses of study. Observe what children do in their classrooms, how teachers work with them, how principals work with their teachers, how faculties work together to change their schools. You will find that many schools have changed considerably during the past several years. You will find that the principles of a really progressive education have influenced these changes. But you will find the changes in the great majority of our schools have been very gradual and very small in comparison with what community life today demands of its youth. By no stretch of the imagination could one say that they have departed from the traditional school program sufficiently to justify the term "gone progressive." The greatest change has been in ways teachers work with children and in the degree to which teachers attempt to enlist children's interests in learning. And these changes are more frequently brought about by the individual child-minded teacher than by concerted attempts by the organized personnel of the school.

Even in the schools and in the classrooms in which poor work is being done, in which there is evidence of undisciplined behavior and unsocial attitudes, there is little evidence that this is due to most of the teachers concerned having tried to "go progressive." Those that have show quite clearly that they are still poor teachers.

When we read the criticism of the schools on the grounds of their progressive tendencies, we wonder if the writer does not subscribe to the purposes of the public school in its efforts to progress. We wonder if he does not approve of progress through democratic social processes. Perhaps he has not evaluated what he has observed of change in the schools in these terms. Is he simply, by an appeal to prejudice, trying to create a doubt in the soundness of the educational program? Or may he be trying to win applause through facile criticism whose unsoundness is concealed in a false assumption often not even stated?

[*Roy W. Morrison is a member of the faculty of the University of North Carolina. Reported from* North Carolina Education, *XI (February, 1945), 296, 302-3.*]

DURING the last four months an increase of 70 percent has taken place in the voluntary enrolment of American soldiers in the so-called battalion schools. Arithmetic, bookkeeping, and business subjects are most popular.

THE POSTWAR CURRICULUM: THE SUPERIORITY OF THE FUNCTIONAL PLAN

FRANKLIN BOBBITT

In the School Review

THE previous article mentioned the basic characteristics of two mutually repugnant conceptions of the curriculum, one called the functional and the other the academic. [EDITOR'S NOTE: See pages 1-5, March issue.] While both of these opposed conceptions are at present operative in the field, is it not possible that one of them is better than the other for all the areas of education? Let us examine two questions: (1) Which plan is used in those parts of education that are best understood and taken most seriously? (2) Which is used in the rest of the program?

Two broad areas of our program have long been taken seriously. One is literacy—the various human functions of reading, writing, spelling, computing, measuring, reading maps, using the time system, and such other everyday techniques as are needed by everybody. That they are taken seriously is proved by the outcry when schools are remiss in bringing the children to read, write, spell, and the rest. The recognized test is the ability to function in those practical situations that call for a proficient exercise of the function. It is generally accepted that the way to become expert in them is to do them again and again, always being careful to do one's best, until proficiency is attained. When functioning is the objective, the method, the result, and the test, it is the functional plan of education that is employed. Education for a calling—whether that of doctor, farmer, printer, lawyer, plumber, secretary, or any other—is another area that is both understood and taken seriously. Vocational education, where actual and not mere academic make-believe, is clearly of functional type since function is objective, process, result, and test. It is the type that several thousand years of practical experience pronounces best for this area. It is also the type sanctioned by both common sense and educational science.

A third matter that is taken with great seriousness in high schools and colleges is the training of the star athletes for the utmost skill in their competitive games. No skilled athlete is ever trained by the academic textbook plan. The functional plan is so completely the way of both experience and common sense that even the suggestion of the academic plan appears irrelevant and absurd.

Let us turn to the opposite question: Which plan is used in those areas of education where objectives in terms of human living are nebulous and where a driving desire for proficiency does not exist?

One of these areas is education

for good citizenship. We do not know the functions that characterize the good citizen. People see rather definitely, in a myopic way, what they may do to further their personal interests and those of their special group, party, sect, union, association or social class; and these personal and partisan functions so completely engage their attention and practical effort that they remain oblivious to the functions required for promoting the well-being of society as a whole.

When persons are unaware of their real civic functions, they can have no desire to perform those functions—and they do not. The functional program in citizenship education, therefore, remains impossible for the present. The functional program cannot be built on ignorance, apathy, or nonperformance—the things on which the academic plan thrives.

By and large, citizenship education is yet an area in which ignorance reigns and which, for that reason, can employ only the evasive academic method. The resultant present-day program, to speak soberly and unemotionally, has left our nation, like all the nations, in the sloughs of a world-wide ignorance of social matters that has brought on humankind the present orgy of confusion and measureless disaster. The wisdom and good will that are the fruits of a wise education could have avoided it all. But neither our country nor any other had that kind. The purely academic education is never wise; and it was, therefore, powerless.

Other areas in which the objectives are vague and confused and in which there is lack of desire to function efficiently are (1) education for wholesome physical living and health care; (2) education for proficiency in that wholesome and continuous intellectual functioning that builds, maintains, and matures the degree and kind of understanding required for successful management of affairs in a free and advancing social order; (3) education for suitable personality-building recreations; (4) education for the unspecialized practical activities, mainly of home life; and (5) others enumerated previously.

The slightest consideration of these areas shows them to be fields of doing. But knowledge of the specific kinds and amounts of doing that are best for persons is vague and confused. Actual human living in the several areas shows them to be operated more by whim, wish, guess, emotion, opportunity, habit, custom, surrounding conditions, and plain ignorance than by a properly rounded and matured understanding. Diversity and contradictoriness of practices prevent their being patterns for children and youths. Functional objectives cannot, then, be established. From such abundant ignorance, apathy, and nonperformance, no functional program can emerge.

An academic program, on the other hand, is scarcely any problem at all. It is easy to select some textbooks and start the machinery. A casual view of the several areas shows that people need some physical science, some biological science, and some social science, some mathematics, some language, grammar, literature, history, and fine and practical arts. These subjects can all be found ready put up in textbooks prepared by reliable specialists. Let a balanced portion of them be administered to each pupil, and he will then have what he needs in each area as occasion arises.

When curriculum planning is that simple and when the momentum of the academic is so great that nothing else is, or can be, thought of, naturally the academic plan is used. The result is the well known jerry-built type of program, the use of which leaves the world in its complacently maleducated condition.

We can now answer the question: Which of the two plans do people use when they know what they want and when they really mean business?

The conclusion seems to be: *Out of understanding, and of desire for what understanding sanctions, issues the functional plan of education; and out of ignorance, apathy, and blind tradition issues the academic plan.* It would appear, then, that the functional plan is the one to be chosen.

Must we choose? Instead, may we not combine the two plans and utilize the good features of both?

The answer is: They will not combine. They have different objectives, motives, processes, results, and tests. However, they can be mixed—and each thereby confused. No plan that is a mixture can be kept going for long. It is unstable and will gravitate toward one or the other of the two disparate forms.

The way to spoil a good vocational program is to introduce an admixture of the merely aimless academic. Whenever an improvement is proclaimed in a vocational course, it is almost always some method of increasing the functional element.

Before those who direct the education of elementary school, high school, and preprofessional college, there lies a long and difficult task: to advance the larger part of the program from the primitive academic level where it now is to the functional level of advanced and effective performance.

The task involves the changing of obdurate basic conditions that will yield but slowly. Speed of advance will be almost imperceptible. But the master-profession, as ours is, will be very remiss in the discharge of its responsibility if it does not buckle down to the task with all sense of urgency and do the job with all the speed that is possible.

Unless the world fairly soon finds an improved method of bring-

ing out and shaping human understanding, attitudes, valuations, character, and ways of performance, there can be nothing ahead for humanity but greater civil confusions and more frightful wars and massacres; for, after all, what is now going on in a turbulent world is but the natural and inevitable issue of human nature *as it has been shaped* down to the present.

The basic task of education is to take in hand the enormously plastic human nature, to bring out its strengths, and to shape them into the forms which not only can build and maintain a humane world-wide social order but which cannot be prevailed on to do anything else. The task is to bring each person's mental powers to function in the ways that build sound understanding, valuations, attitudes, propulsions toward things that upbuild, and inhibitions against those that injure or destroy. It is to bring each person's social powers so to function that they are made to grow into the forms that create and operate a beneficent social order. It is to bring his powers of every sort so to function as to create wholesome civilized personalities.

Let it not be forgotten, however, that human nature of the type required for the high and magnificent civilization of which mankind is capable issues only from the kinds of functionings that constitute that type of civilization. They are characterized by freedom, selfdirection, selfoperation, selfcontrol, selfdenial, selfsacrifice, selfgovernment. Freedom is selffunctioning. It is the opposite of regimentation, and cannot be brought into being by regimentation.

Even the defeatist admits that vocational education knows how to shape — change — the powers of those who come to do carpentering, typewriting, engineering, singing, research, and the hundreds of other vocational specialties. Using similar procedures, education can change and shape in equally large measure such other series of functionings as those of citizenship, recreation, intellectual functioning, and all the rest. The educational profession, along with the laymen, can do the job when they are willing to do the amount of hard common-sense thinking that is necessary for maturing their understanding of these aspects of human experience.

[*Franklin Bobbitt is Professor Emeritus of Education at the University of Chicago. Reported from the* School Review, *XIII (March, 1945), 148-53.*]

AN ANALYSIS OF THE ARITHMETIC KNOWLEDGE OF HIGH-SCHOOL PUPILS

JACOB S. ORLEANS AND EMANUEL SAXE

In the Balance Sheet

"WHATEVER the accomplishments of the pupils might have been in arithmetic at the time they learned it, the residuum of such learning, a short time after the formal teaching of the subject has ceased, is a pitifully meager quantity." This sentence epitomizes the results of a study we made of the arithmetic knowledge of some 2300 pupils in 11 New York City high schools and seven high schools in other communities.

The test covered 55 tasks in computational skills, problem solving, number concepts, business terminology, and clerical arithmetic. Virtually all the content of the test is included within typical elementary-school arithmetic courses of study planned for eight years.

The major contribution of this study is the analysis of pupils' errors, in which we were aided by Dr. Walter F. Cassidy of the College of the City of New York. The wrong answers were tabulated to find out which ones occurred most frequently and, for each of the most frequently occurring wrong answers, the methods which the pupils used to solve these problems were given. It is our intention that this analysis should serve as a basis for suggesting modifications in technique and procedure for the purpose of improving the teaching and learning of arithmetic. An illustration of the kind of analysis made follows:

Problem 3: A merchant sold a chair for $60. He sold it at a profit of 25 percent of what the chair cost him. How much did it cost him?

Nine pupils out of ten did not solve this problem correctly. There were only 31 who failed to attempt to solve it, or who could not complete it. Although 62 different wrong answers were obtained by the pupils, there were three that occurred with a high degree of frequency. The solutions leading to the frequently occurring wrong answers are as follows:

1. $45: $60×¼=$15; $60—$15=$45. This is really an obviously wrong solution. The pupil treats the profit as one-fourth of the selling price instead of one-fourth of the cost.

2. $15: $60×¼=$15. The pupil computed the profit as one-fourth of the selling price and either lost sight of the question he was trying to answer, or did not understand the question in the first place, or sensed that he was wrong and did not know what to do about it.

3. $75: $60×¼=$15; $60+$15=$75. In this solution we see a clear element of reasoning. Perhaps the pupil decided that there was an error in the statement of the problem. The profit is one-fourth of the cost, but the cost is not known. In fact, it is the thing to be found. The profit is one-fourth of something, and the only something given is $60. Therefore, that must be the cost; in which case the profit is added to that cost.

The lack of evaluation of the answer is apparent. In the first place, the work can be checked. One of the conditions of

the problem is that the profit is one-fourth of the cost. Even if the 10 percent of the pupils who got the correct answer did check their work, it is apparent that nine out of every ten did not.

When one considers the sheer simplicity of this situation and then notes the amazing variety of attempts to manipulate the numbers, one may well ask just what learning the pupils have done as a basis for solving such problems. For example, do the pupils appreciate the business setting? Moreover, in order to solve this and many other problems, the pupil must understand relationships—the relationships of quantitative values and what they mean. He must also develop ingenuity and initiative in figuring out such relationships and in applying them. The results presented above would indicate clearly a marked inability to interpret a situation and to do the simple reasoning that is called for, as well as the routine (and often wrong) application of methods acquired by rote learning.

This study does not present evidence in a form that directly stipulates certain procedures or techniques, but the following facts seem to be clearly implied:

1. In place of learning the academic subject of arithmetic, pupils should learn to deal meaningfully and purposefully with real situations that require the use of numbers.

2. In order to do that, they must learn the meanings of numbers and how to use them in such real situations.

3. All arithmetic "activities" must have concrete meaning for the pupil.

4. All learning with numbers must be based on adequate mastery of basic concepts, understandings, and number facts as developed from real, meaningful, purposeful situations.

5. Methods of expressing and treating numbers must be learned not as "arithmetic" but as fulfilling specific needs; that is, for the solution of real, meaningful, purposeful problems or for engaging in real, meaningful, purposeful experiences, and as time-saving and more accurate methods of computing desired values.

6. Since the element of meaning is the item of vocabulary (word or expression), pupils must learn the meanings of the terms they use.

7. Pupils must learn to develop initiative, originality, independence, and reliability in dealing with numbers, particularly with new situations.

8. Pupils must be taught to check all work with numbers.

9. Pupils must be taught to evaluate the work they do and the outcomes of their work in terms of the conditions of, or limitations set by, the problem with which they are dealing.

These drastic conclusions are based on the analyses of pupils' errors; on the fact that few of the

simple tasks presented in the test were done correctly by large percentages of the pupils; and on the fact that the gain in achievement in arithmetic was slight for those pupils who were retested on the same tasks after having studied commercial arithmetic for a half year.

There is need for realizing how many different wrong things pupils can do and in how many different ways they can do them. Only then will it be evident that learning built on rote is built on quicksand. It is bound to disappear because of the liquidity, or the lack of cohesive substance, of the basis on which it rests. When that realization is clear, it will be evident that learning must be built on meaning and purpose, because drill accompanying meaning and purpose is so much more effective and leaves so much less to the pupils' imagination.

One must obviously expect less than perfection in learning at the time the learning takes place, and some forgetting as skills suffer from disuse. But this is not true to the extent that is revealed by this study. Until such changes as are indicated here are put into effect, the educational aims (for the attainment of which arithmetic is taught) will not be adequately realized, and the expenditure of pupil and teacher time and effort on the study of arithmetic cannot be justified.

[*Jacob S. Orleans and Emanuel Saxe are members of the faculty of the School of Business and Civic Administration, The College of the City of New York. Reported from the* Balance Sheet, *XXVI (February, 1945), 203-5.*]

THE Shorewood, Wisconsin, High School offers to each senior an interesting unit called, "After Graduation, What?" Presented by the social-studies department, the material is designed to aid in the adjustment of graduates to the world of work, to the armed services; and to college life. The unit lasts three weeks and provided are outlines, charts, and tables for studying occupations as well as one's own qualifications, complete references for study and reading, and questions for discussion.—*Guidance Newsletter.*

A TRUCE AMONG EDUCATORS

JAMES BRYANT CONANT

In the Bulletin of the National Association of Secondary-School Principals

ALMOST all the critics of secondary education whom I have heard share one thing in common, namely, intense ignorance of the present status and future problems of the public schools. With lack of information goes lack of understanding and lack of sympathy. As a result, on more than one campus we have almost a state of civil war between those who profess a knowledge of education and those who profess a knowledge of the wide range of subjects which constitute a modern educational curriculum.

This academic war has been in a sense inevitable as I propose to show by a brief resumé of history, but to my mind an armistice has been for some years overdue. And it is for such an armistice that I should like to put in a good word. We can hardly expect the lay public to have a very clear understanding about educational problems when education is a house warring against itself. Hence my plea for a "cease firing" order.

But when and how did this war among the educators commence? If one proposes to outline a plan for peace, he should perhaps be familiar with the genesis of the quarrel.

You all know that the expansion of the high schools of the country since the 1880's has been nothing short of astronomical. Instead of dealing with some mere 300,000 boys and girls, the secondary schools of the country must now provide for 7,000,000. Instead of being concerned with the education of a very small proportion of the boys and girls from 14 to 18 years of age, the high schools now must accommodate nearly three-fourths of the entire age group. The mere physical expansion would in itself have presented a major problem to the institutions of higher education concerned with the training of teachers, but another and still more important factor entered in.

In the 1880's the high schools and their equivalent—the private academies and preparatory schools—were essentially concerned with a group of young people who were preparing for entrance into college. In terms of aims and ambitions the student body was relatively homogeneous. But in the last 50 years the scene has been changing rapidly with each passing decade. Quite apart from the enormous numerical expansion of the schools, the composition and aims of the student body have vastly altered. No longer are the schools primarily concerned with preparing boys and girls for college. Consider these figures:

In 1870 approximately the same number of male students were graduated from all the American high

schools as from all the colleges. In 1890 there were, roughly, four times as many boys and girls being graduated from high school as from college. By 1940 the ratio had changed so that there were twelve times as many being graduated from high school as from college. That is, the percentage college-bound had diminished by a factor of three. Or, to put it another way, in the 70's and early 80's almost all the boys who were graduated from the high schools or their equivalent subsequently went on to college, while today only about one in five of the high-school male students is headed toward formal higher education. As soon as the expansion of public education had reached the point where the composition of the student body of the high school had materially altered, forces of an entirely different sort emerged; from then on the schools faced a totally different job from that which concerned them 50 or 60 years ago.

Now, let us see who set about to consider ways and means of training the teachers for these new schools, and who it was who undertook to think out the educational implications of the vast social change. All the evidence indicates that the faculties of arts and sciences in our colleges stood around and bemoaned the situation and wrung their hands. It was left to the schools of education or departments of education in the colleges to see how the demands could be met, to discover what were the best ways to educate teachers to handle the new burdens America had placed before them.

Until very recently, if not until this very moment, a Gallup poll of opinion among professors of conventional subjects in colleges and universities would, I feel sure, record the opinion that our secondary schools had failed dismally in their task. This same opinion would be, as I indicated earlier, the fundamental premise of many laymen in a discussion of current education. This is all the result of the fact that the curriculum of the schools has been adjusted to meet the totally new situation which has developed. It must be admitted, of course, that many promising youths enter college today without having mastered those skills which would be extremely useful to them later—they come without that knowledge of mathematics and languages which 50 years ago would have been, as a matter of course, their passport for admission into these colleges.

But to judge American education in terms of the skills which have been acquired and the formal training to which the boys and girls who enter college have been exposed is completely to misunderstand the situation. It is to fail to understand the educational problem which America has for the first time in history endeavored to solve. I cannot refrain from quoting a very discerning young British writer

who has made a study of this country.

Mr. Brogan, in his little book of *The American Character,* rightly observes that if American education is thought of primarily as a means of formal education, "it will be overrated and underrated. It will be overrated because the figures of two million college students, of seven million high-school students, will dazzle the visitor used to seeing opportunities for higher education doled out (except in Soviet Russia) on a combined class-and-intellectual basis. It will be underrated if, at any stage below the highest (that is, below the great universities), the academic standards are compared with those of a good English, French, or pre-Hitler German school. If these millions of boys and girls are to be judged by their academic accomplishments, they will be judged harshly. . . But they are not to be so judged, for their schools are doing far more than instruct them; they are letting them instruct each other in how to live in America."

We have today in action on many fronts millions and millions of young men who have recently attended our public schools. They have proved themselves adaptable not only to changing physical and material conditions, but to a changed climate of opinion as great as the difference in temperature between the tropics and the poles! They had developed in their schooling the greatest quality necessary in modern times—the ability to change the aim as the target moves.

To return now to my suggestions for a truce:

1. Let it be agreed by the professors in our colleges and universities that the high schools of the country today have a job to do which is not to be measured primarily in terms of their success or failure in the formal education of the specially gifted youth.

2. Let it be admitted that, by and large, a good job has been done in providing an education for a large proportion of American youth and that the present movement is in the right direction.

3. Let the professors agree to find out more about the real problems facing the high schools of the country and the type of education which should be supplied to the vast numbers of boys and girls for whom a four-year college or university is far from being the proper educational channel.

4. On the other hand, let the educators agree that in attempting to solve the terrific problems of the last 50 years they have neglected a number of important problems which concern the type of youth who should in the best interests of the nation go on to college.

5. Let those concerned primarily with high-school education agree to (*a*) explore more sympathetically the ways and means of discovering special talent at a young age; (*b*)

provide a greater motivation among many groups to evolve a greater degree of intellectual curiosity; and (*c*) provide better formal instruction for those of high scholastic aptitude — all this to be accomplished without a segregation which might turn the boys and girls in question into either prigs or academic snobs.

6. Let the schools agree that if the colleges will give up many of their formal requirements for admission in terms of content of courses (as certain of the eastern colleges have done already), they in turn will be willing to rate their students continuously in terms of scholastic aptitude. Thus if the college can no longer count on adequate training in special skills it may know better than ever before that it is choosing potential brain power.

[*James Bryant Conant is President of Harvard University. Reported from the* Bulletin of the National Association of Secondary-School Principals, *XXIX (January, 1945), 3-8.*]

A RECENT issue of *Stars and Stripes,* the Army newspaper, contained an editorial entitled "Wanted: Education for Life." A portion of the GI editorialist's comment follows:

"The Army Office of Education reports 23.3 percent of the troops in today's Army finished four years of high school. Another 3.6 percent had four or more years of college. If we read that right, it means that about 70 *percent of American men of fighting age have had less than a high-school education.* And if that's the case, we think the record of education in the good old U. S. A. stinks. In three years we've trained 10,000,000 men to be masters of the killing arts. No holds, no expenses barred. Complicated, technical stuff, but we taught it. Millions for teaching murder . . . against the thousands formerly spent for teaching peace.

"Tomorrow's educators will inherit the world's biggest job. The world will be their classroom. The kids of a hundred countries their scholars. Today's tragedy their text. The little red schoolhouse must change its tune. Yesterday's tripe won't do. New times demand new techniques. With less Latin and more life. Less hieroglyphics and more humanity."

"THE ELEPHANT IS A SPEAR"

EDWARD DARLING

In Social Education

THAT democracy can work in a practical world I am not yet ready to deny, having had an experience which has shaken me more than any front page of any paper.

It is easier to be told what is right and what is wrong, black and white, than it is to think it out; and it is easier for a teacher in a classroom to make statements *ex cathedra* than it is to open himself to dispute in matters of fact and opinion.

In matters of discipline, we grant the teacher almost any rights, aside from downright physical violence. The same emergency does not exist in the realm of fact and opinion. Forever unchallenged, what chance has a teacher to grow? Among the infallible no change can occur and none would be valid.

I have just returned from the classroom of a teacher.

"Why should you trust my word?" he asked his pupils. "I'm not an authority. I'm just one of a million teachers. I don't *know*, for sure, half of the things which I state to you as facts."

He had been outraged by the talk of a pupil who had given his father's word as ample proof of a "fact"—which, as it happened, was wrong. The students had been asked to discover in any way they could what the number of Massachusetts electors is. Henry Slade had come in with the figure 17. In 1944 that figure happened to be 16. In Massachusetts there has been a reapportionment, as in many other states, notably California, where two extra Congressional districts have been added.

It so happened that this boy had been the very first to raise his hand when the question was asked. He was positive. His father, a town employee at Town Hall, had said so. He loved and trusted his father. Therefore, it was out of the question that his father's word should be doubted.

One could go further with this idea. His father stood (to Henry Slade) for integrity, authority, aid, warmth, food, safety, and comfort. For these and similar reasons, Henry Slade loved his father. Now, love is an emotion; and emotion is remembered longer than reason. Therefore, associating love with fact, Henry had taken as gospel the statement that Massachusetts had 17 electors.

But Mr. Howard, the social-studies teacher, had been outraged. I saw him. He realized that a whole period devoted to a discussion of the nature of evidence would not be a wasted period. And I wondered if he were bright or stupid—because these pupils were only 12 years old.

"Listen," Mr. Howard said. "Is

that a good reason? Young Slade's father says it's 17; so is that a good reason?"

"Yes," said most of his pupils.

"All right," said Mr. Howard. "I am telling you that the North Pole is used by the Eskimos at Christmas as a part of their trick of chasing a greased pig up and down it to see who can first plant the flag of our glorious country at its peak. Does that make any sense?"

Some pupils actually thought it did, but many wavered, and some discounted the possibility completely.

"There isn't any North Pole," one pupil said.

"What do you mean, 'There isn't any North Pole'?"

"Yes?" asked Mr. Howard. "And how do you know?"

"It's not a pole, it's a place," the pupil answered.

"Oh," the pupil laughed, "Everybody knows that."

"Well," said Mr. Howard, "that's just where you're wrong. Everybody does *not* know that. In fact, I doubt it. In short, I simply do not believe you. Can you prove it?"

There was a silence. Then Mr. Howard said: "Look. I love my mama and my papa. I even had one *teacher* that I liked pretty well. But now you're historians. You are men and women of science. How are you going to tell what's true?" Satisfied by the report of a pupil who took a trip to the library, the North Pole matter was quickly dismissed.

But the identity of United States senators from Massachusetts, raised in connection with the number of electors in Massachusetts, proved more difficult.

In the *World Almanac* the answer was clear enough: on page 590 of the 1944 edition this information was given: David L. Walsh, Democrat, of Clinton, term expires in 1947; Henry C. Lodge, Jr., Republican, of Beverly, term expires in 1949.

Being an ignoramus, I, sitting in the rear of the room and listening only, gave critical assent to this finding—without any thought at all, until a more critical 12-year-old mind raised the question, as the teacher's brows curled into lopsided questionmarks, "Isn't Lodge in the Army?"

"Here," said Mr. Howard, with a flourish, "is exactly the sort of question which is worth precisely one million dollars. Pay the gentleman, treasurer. . . . How shall this query be answered?"

Some pupil suggested the encyclopedia, but was quickly overruled on obvious grounds. Nobody seemed to have any answer at all. But the discussion of acceptable proof was reaping its rewards. Nobody suggested asking papa or mama; or even Uncle Henry.

I thought Mr. Howard did the wise thing then. Instead of telling the answer—and I'm certain, from

subsequent discussion, that he knew it—he offered a prize of an extra credit of an *A* paper in the course to the pupil who could bring in conclusive evidence next day showing whether Mr. Lodge was in the Senate, and, if not, who was, and when the change was made.

Not being a free spirit, I could not attend the next meeting of Mr. Howard's class, but I saw him and learned of his results.

1. Bradley Atwater had called up the *Boston Traveler* office, and after a 30-minute wait, had garnered the following information: Mr. Sinclair Weeks of Newton, Republican, was appointed to the Senate by Governor Leverett Saltonstall on February 9, 1944, and was sworn in on February 15, 1944. From page one of that paper on the above dates.

2. Alice Black offered this: Sinclair Weeks, Republican Senator from Massachusetts, had cast a vote in favor of UNRRA on February 17, 1944, according to the *New Republic,* Part II, May 8, 1944, page 653.

3. James Mahoney, whose mother works in a library, said that the magazine *Boston Business,* dated March 1944, on page 50, could be quoted: "Bostonian of the month by a wide margin is new Senator Weeks, appointed by Governor Saltonstall to succeed Senator Lodge. Son of a senator and Secretary of War, the state's new junior solon is one of those all too *rara Avis,* a combination of business man and politician. He is national treasurer of his party. . ."

4. Margaret DiSilva offered the evidence of *Facts on File* (a weekly digest of world events "published in two sections by Person's Index, New York City"), vol. 4, February 2-8, 1944, page 40. The publication headlined "Lodge Resigns for Army Service," and on page 41, "Weeks Succeeds Lodge. . . Governor Leverett Saltonstall of Massachusetts Appoints Sinclair Weeks. . . ."

5. Edward Jener came in with a quotation from *Time* magazine of February 14, 1944, quoting Lodge's letter of resignation (p. 22).

6. Beatrice Parker offered the U. S. Constitution, Article X, Section V, Paragraph I, showing that if a vacancy of this sort occurs, the chief executive of the state must do the appointing of a successor to a senator who resigns.

All but the last were given the extra credit; but the Parker girl was given high praise in spite of the fact that she had not found the evidence required.

I wondered if the habit of thinking *after* evidence had been acquired had been started in this class. Whether they would continue to demand, in the face of a presidential election, evidence for an opinion expressed, seemed to me very important.

Of course, we cannot know. Not for ten years, anyhow. We can hope that international affairs—recogni-

tion of an Italian government, a Yugoslavian, a Greek, or an Argentine—will be based on evidence rather than passion; that if Aunt Henrietta says at dinner that the President is stupid or criminal, the listener's opinion will be held in abeyance pending proof; but we cannot know.

We can know that passion is longer recalled than fact; we can thank Mr. Howard for his attempt and pay him enough to keep him on the job; but after that, it depends on the home, on us. Still, hope and vision are the requisites to racial continuity. Those are not denied us!

[*Edward Darling teaches social studies at the Belmont, Massachusetts, Junior High School. Reported from* Social Education, *IX (March, 1945), 115-16.*]

THE typical young midwesterner with a college education has had a 50-50 chance of becoming a commissioned officer, while men with no more than a high-school education have had the same chance of becoming sergeants but only one chance in four of being commissioned. These facts were revealed by studies made before last July 1 by Prof. Robert J. Havighurst, secretary of the University of Chicago's committee on human development, and Miss Mary Russell, Walgreen Foundation researcher at the university, who report in the current issue of the *School Review.*

"There is a very high positive relation between rank in the armed services and educational attainment prior to entering the services," they report. Having at least a high-school education is "almost essential for promotion to the level of commissioned officers." A sample group of 163 servicemen was scientifically selected and the records of the men were examined.

Discussing the relation of social status to army advancement, the authors state: "Almost half the boys from the upper and upper-middle class families are officers or officers candidates. On the other hand, only 13 percent of the upper-lower class and none at all of the lower-lower class are officers. The young men from the lower-middle, upper-lower, and lower-lower classes have been equally successful in reaching the rating of sergeants and other noncommissioned officers."

WORKBOOKS

GEORGE E. CARROTHERS

In Observations

WE hear the word "workbook" in every grade of every school these days and the first part of the word is about the only place where "work" is discovered in some classes. Possibly the name "workbook" is chosen for the same reason that the six-footer in the small village is called "Shorty"—because he is *not*. Workbooks everywhere; authors' meal ticket; publishers' source of revenue; teachers' godsend, makeshift, or pet aversion, as the case may be; pupils' crutches or skids on which they slide through school; parents' constant expense; America's opportunity to waste tons of paper. And the end is not yet. We like to do things in a big, spectacular way in America, and schools are surely trying to outdo one another in the extent to which workbooks are supplied to pupils.

Few teachers or administrators seem to be able to make up their minds very definitely as to what should be done about workbooks. The avalanche has struck the schools and the situation is being accepted. "Everyone else is using them, why shouldn't you?" is both the tacit and the open suggestion of authors, publishers, and a considerable proportion of the teaching profession. We don't know just where we're going, or what we're accomplishing, or where we're coming out, but we don't want to miss anything.

If it were merely an interesting diversion operating with material affairs, we would not need to be greatly concerned. Tom Thumb golf courses appeared in every back yard or kitchen sink within a few short years after their discovery. But they were concerned only with money and materials. When, however, the venture touches the lives and the educational future of millions of youngsters, we hardly dare rush blindly ahead; it behooves us to take stock of the procedure and the possible outcomes.

During the first years of this mushroom growth there appeared to be no unusual successes or failures in the use of the so-called workbooks. But the present excessive and all-pervading presence of these crutches throughout both elementary and secondary schools is such that a widespread, thoughtful examination of their educational value is imperative and long overdue. School administrators and classroom teachers need to consider seriously the question: "Are we making blank-fillers out of pupils?"

It is my observation that in first-class schools with efficient teachers, workbooks judiciously used are serving a very useful purpose. Superior teachers obtain good results with workbooks even as they obtain good results when using other methods and devices. The average

and below-average teachers, of which there are increasing numbers in schools today, obtain less satisfactory results with workbooks and other prepared "reliefs" than with the usual or traditional methods. These helps (?), published in a multiplicity of forms, are used as makeshifts (1) when teachers find themselves assigned so many classes and extra duties that careful preparation is impossible, (2) when they are transferred to the teaching of subjects which they have not studied, (3) when for one reason or another they have neglected to make on the previous day preparation which might have been possible, (4) when the administrator or other visitor decides to spend a period in the classroom, (5) when the teacher merely wants a period or day off from teaching, (6) when thoughtful preparation is just not to the liking of the teacher, or (7) when the teacher does not know how to make preparation for the specific subject. In any one of these instances the use of workbooks simply results for the most part in time-serving for pupils and therefore is a waste of both time and educational opportunity.

Occasionally I visit the kindergarten room to watch tiny tots build block houses. Sometimes the teacher pulls out one block and puts in another which appears to her more appropriate for that space than the one used by the pupil. The pupil accepts the situation and goes on piling up blocks. Somewhat the same situation is found at times in elementary and secondary schools. There are many blanks to be filled. A pupil suggests one word; the teacher objects to that one. Another is suggested, and still another, until finally the longed-for nod of the teacher is obtained and all the pupils fill in that word. Later, when we take a new workbook and ask a pupil to tell the correct word for each blank, he is usually at a loss to give answers in which he has any confidence. Sometimes I am puzzled myself. And I am sure that by the next day practically every pupil is as puzzled as he was prior to the workbook exercise. But the all-important question is "Was there any opportunity provided for pupils to do a bit of thinking?" Actually, thinking has been inhibited, originality frowned on, and guessing encouraged.

In contrast with this performance, we know that when pupils are assigned topics which they are to investigate and on which they are to bring together information, much of it of a controversial nature, from various sources; when pupils are held to and assisted in separating truth from error, fact from mere opinion; when they are then expected to organize their ideas and express them in their own words, either orally or in written form, they are getting practice in useful analysis and in simple thinking. This process if continued will

eventually develop the thoughtful human being, the kind of citizen needed in a democracy.

If we are concerned primarily with getting young people to be clock punchers, to be routine factory workers running drill presses and other automatic machinery, or merely to be good cogs in our big industrial machine, then the filling of blanks is not to be so greatly deplored. On the other hand, if a democracy is dependent for its success on the ability of citizens in general to do some thinking for themselves, then schools should be specially concerned with what workbooks are doing to children in their formative years. The situation is in need of thorough investigation.

[*George E. Carrothers is Director of the Bureau of Cooperation with Educational Institutions, University of Michigan. Reported from* Observations *(Bureau Leaflet 23), March, 1945.*]

ALL Americans of high-school age should have 10 thousand miles of national travel as a part of their education, declares Beardsley Ruml, author of the "pay-as-you-go" tax plan in the March issue of *Coronet* magazine. Every year two million youngsters would gain first-hand knowledge of their country—its industry, agriculture, and history.

Such a tremendous educational project is no mere school children's picnic, with teacher taking the kids for a trip into the country. The tours call for big organization, big expenditures, and most of all, big thinking. About 10 million youths might well be eligible for travel. Each youngster would spend 100 days covering 10 thousand miles and, although local groups would be expected to cooperate, the travelers must be accompanied by a corps of specially trained teacher-guides.

Endless arguments for and against the proposed tours can and should be raised. But America and the world will badly need a spirit of understanding cooperation after the war. Sectionalism is the scourge of modern civilization and the aim must be to banish sectionalism nationally and internationally, economically and culturally. National tours would be a big step in that direction, concludes *Coronet*.

THE BARRIERS TO TEACHER RECRUITING

B. A. Stevens
In Ohio Schools

THROUGHOUT the past three or four decades the extension of public-school opportunities and the growth of school attendance have created a need which has far exceeded the supply of fully trained teachers. To meet the ever-expanding pupil enrolments, it was necesary to admit to teaching service persons with meager preparation. For years, evidence of a reasonable degree of proficiency in the common branches was all that was required to qualify for a teaching certificate and a job. To many who so qualified as teachers, the service was little more than a convenient and mildly profitable interim between life as a pupil and the attainment of some more desired status in life.

Included in this heterogeneous body of teachers which resulted from these conditions was a nucleus of professionally minded persons. They took their responsibilities seriously and strove to fit themselves for their job, viewing their occupation as teachers as a career. Gradually, with the development of teacher-training programs in the colleges and with legislation encouraging the employment of better prepared teachers, the number of professional teachers has grown.

Nevertheless, progress in the professionalization of teaching has been slow. Our ranks are still filled too commonly with the poorly prepared and the transient. Doubtless there always will be a heavy loss of younger teachers as they turn from t e a c h i n g to homemaking, but there need be no low professional standards because of a lack of adequate training. Hence, for the increased professionalization of teaching there is much that can be done by increasing the supply of trained young people.

This is the purpose of our state and national associations in their present campaign to recruit prospective teachers. Efforts are being made to encourage able high-school seniors with favorable personalities to enroll in teacher-training courses of the colleges they are to enter.

This task of recruiting prospective teachers is not easy. The Teacher Education Workshop of the George Peabody College for Teachers, in its report entitled *Pre-Service Education of Elementary Teachers,* states, "Many young people do not think of teaching as a desirable profession." The report lists five causes of this attitude. In our recruitment, how are we to meet these objections?

1. "The education departments are often the weakest divisions of institutions. This is due, in part, to the administrative policy of allocating funds to the several departments of an institution on the basis of en-

rolment. As a result, students make comparisons unfavorable to education."

It certainly is alarming if this statement with regard to the weakness of college education departments is true. If it is, one wonders whether the weakness of the departments is not the cause of the low enrolment which in turn invites inadequate support. The staffing of education departments of our colleges with persons who through practical follow-up and in-service training in the field can demonstrate the ability to produce successful teachers and to make practicing teachers better may be a partial solution of this problem.

2. "The material rewards of teaching (salary) are not comparable with those of individuals in the other services necessary to the maintenance of a democratic society which require an equal amount (or even less) of general and professional education."

Prospective teachers should be led to see beyond the wage levels of the present war period. Emphasis should be put on the likely stability of a teacher's income over the years that lie ahead. Stress also needs to be given the idea that well-qualified teachers working in cooperation can do much to improve the economic status of the teachers of the future. Poor qualifications and a lack of organized effort have to no small degree been the cause of the low economic position of teachers.

3. "The conviction in too many instances that the social life of the teacher must of necessity be restricted causes young people to choose other professions. Likewise, the knowledge that in many communities where there are schools there is no social life causes young people to turn away from teaching as a profession."

Those counseling prospective teachers need to make clear that all positions are not equally suited to the individual teacher. It is just as vital to the teacher that he select the community in which he is to work as it is for the superintendent of schools and the board of education to select the teachers to staff the schools. A beginning teacher without an interest in rural life or some knowledge of farm problems has no business accepting employment in a rural community.

Likewise, certain teachers, ill adapted to the administrative policies of certain school systems, would fit smoothly in other organizations. It is the business of placement bureaus and faculties to meet this problem. Numerous field contacts made by the faculties of our teacher-training institutions would enable instructors to fill a practical role in the guidance of prospective teachers and of the novices during their first years of service.

4. "Too large a percentage of those who teach have little insight into teaching as a profession. As a result, in far too many cases teach-

ing is not a profession; it is merely a means of making a living. Young people sense this."

This presents the problem of attempting to raise ourselves by our bootstraps. To facilitate recruitment, teachers now in service must give more evidence of professionalism. This is not as impossible as it seems. One or two highly professional teachers in a school or in a school system can elevate the tone of the whole staff. Set the example of professionalism and others less favored by training and by zeal will follow your example. Remember a professional teacher recognizes at all times that teaching is a personal service, a service to enable each individual child to discover and develop his potentialities. To render such service, professional study and growth are essential.

5. "Because of the poor teaching they experience as children, young people have all too frequently developed unfavorable attitudes toward teachers and teaching. Preparing consciously to teach is the last thing they would think of doing."

It is to be hoped that this statement is an exaggeration, a trumped-up reason, an alleged cause without foundation in fact. Just the mere suspicion that it may contain elements of truth should serve as a challenge to all teachers.

Have you critically analyzed your classroom practices recently? Have you done anything this year to alter your teaching technique in an effort at greater effectiveness? Have you exerted any real effort to grow professionally? Pupils appraise you more accurately than you think. Is your teaching so poor and ineffective that it leaves a negative mark on youth? The inadequate acquisition of needed habits and skills because of poor teaching is serious, but it is tragic if attitudes of contempt and disregard for teaching and learning are to any discernible degree the product of our teaching inadequacies. Certainly, we cannot seek to persuade youth to follow in a path which we have strewn with briars and pitfalls or which we cannot perceive and follow ourselves.

[*B. A. Stevens is Assistant Secretary for Research, Ohio Education Association. Reported from* Ohio Schools, *XXIII (March, 1945), 98, 143.*]

THE number of children 5 to 14 years of age who were accidentally killed in one year would have filled more than 221 classrooms of ordinary size according to the National Safety Council.

MAKING THE SECONDARY SCIENCE PROGRAM FUNCTION

VICTOR C. SMITH
In Secondary Education

IN a world revolutionized by science and its products, science instruction in the secondary school has plodded its slow, traditional way. The typical senior high school still offers courses in chemistry, physics, and biology, or, worse yet, botany and zoology, with little thought of really meeting the needs of the pupils taking the courses. The present curriculum consists of a standardized and technical body of subject matter offered to the pupil on a take-it-or-leave-it basis.

Because of their failure to function in daily life, it is probable that the traditional sciences of the secondary school will continue after the war the decline which they entered in the 1920's. Thus it is imperative not only for science teachers, but for all adults interested in modern education, to examine the failure of the traditional science program and to consider how the needs of the adolescent child may better be met by improving science instruction.

The faults in the present program are glaring. Physics and chemistry and, to a somewhat lesser extent, biology, are diluted and skimpy versions of the college courses studied by the teachers of these subjects. Repeated researches have shown that the vocabulary of secondary science is hopelessly technical for even the superior pupil. Many investigators have proved what every teacher knows—that the degree of mastery in high-school science courses is so low as to make learning on a functional level possible for only the superior few. Moreover, most secondary-science courses are textbook courses, consisting generally of theory without adequate application to daily living.

But the weaknesses of secondary science are revealed even more clearly by examining what is omitted from the course rather than by evaluating what is included. The study of nutrition and health is usually left behind in the tenth year. Nowhere in the average curriculum is there any hint of the importance of psychology in modern life. Child care and child training are ignored. The physics and chemistry of common consumer goods such as heating plants, insulation, paints, and fuels are scarcely touched.

One reason for the present unsatisfactory condition is found in the competitive, free-elective, semester-unit system now in vogue. Yet there is no logic beyond that of tradition and administrative expediency for having courses last a semester or a year. If the course is not made more flexible, it will be impossible to add to the science curriculum the needed new material

without eliminating much that is good in the present courses. It is certainly no solution to add more semester or year courses to the already overcrowded, competitive, and disorganized curriculum of the average high school.

A remedy which may be offered is the abandonment of the compartmentalized, subject-matter curriculum in favor of a broad field curriculum as typified by the best science courses. A unit may be defined as a comprehensive segment of human experience mastered to a degree that is functional in daily living. Such a unit certainly emphasizes scientific principles, but these principles are developed as a result of contact with information and of experiences in practical situations, instead of being presented as formulas to juggle in fitting hypothetical cases for purposes of mathematical computation.

Let us suppose that analysis of community and pupil needs reveals that the following functional units would satisfy the major needs of a given school population: (1) *chemical change,* (2) foods and nutrition, (3) first aid and home nursing, (4) child psychology, (5) psychology of personal adjustment, (6) air conditioning and insulation, (7) home illumination and decoration, (8) electrical repairs, (9) the earth's surface, (10) meteorology, (11) astronomy for fun, (12) minerals, rocks, and gems, (13) common chemicals, (14) principles of electricity, (15) radio and electrical communication, (16) *the human body,* (17) *the nature of life processes,* (18) reproduction and sex behavior, (19) heredity, (20) the automobile, (21) the airplane, (22) *simple machines, energy, and work,* (23) industrial machines, (24) elementary photography, (25) local wildlife, (26) gardening and soils, (27) greenhouse operation, (28) house design and construction, and (29) pest control. (Units in italics to be required of all secondary pupils.)

To oppose this plan it might immediately be stated by the traditionalists that this subject matter is essentially physics, chemistry, biology, psychology, astronomy, and health scrambled into a meaningless jumble and that it is better either to offer additional courses if needed or to expand present courses. To this point of view the following objections are fundamental: (1) The traditional teacher may honestly intend to embody some new material in the old course, but is just too busy to get around to it. (2) To offer six or eight science courses in a three-year program would increase competition among courses without giving the pupil opportunity to sample all courses. (3) The needs of the pupil are human and not compartmentalized. The tenth-grade pupil does not live in a biological world, the eleventh-grade pupil in a chemical world, nor the twelfth-grade pupil in a

physical world. (4) A cyclic plan of instruction is conducive to better use and better recall of needed information and skills than is a once-over, comprehensive coverage of material. The broad field plan may be made cyclic.

In practice each pupil would elect perhaps 18 of the 29 units offered, each unit to be covered in approximately six weeks. A tenth grade girl might elect units 1, 5, 7, 18, 24, and 26. A boy interested in radio and communication might elect units 1, 22, 14, 8, 11, and 12, for his first year of high school. Neither of these courses would be complete in the traditional or logical sense, but perhaps each would be entirely satisfying to the pupil in meeting the major emotional needs at this time. Under the guidance of skilled counseling, the pupil would be able to master most of the material necessary to meet major needs in a three-year course.

It might be objected that six weeks is too short a period of time to teach these units adequately. Today pupils taking a year of physics or chemistry could learn all that they really master from the course in much less than six weeks. But still they are compelled to sit in frantic boredom, devoting day after day to technical matter they cannot learn, do not wish to learn, and could not use if they did learn. Probably the greatest waste of human effort in our schools today comes from trying to teach the average pupil subject matter which he cannot possibly learn.

The administration of the broad field curriculum to provide for individual needs is actually less involved than it may appear. In a large high school it offers no problem, for teachers can prepare to teach favorite units, and pupils and teachers in the science field can work cooperatively to adjust the program from unit to unit. In the small high school, it may actually lessen the teaching load to follow a broad field program. By breaking down grade and subject-matter barriers, it is possible to offer a given unit to pupils at two or three grade levels at the same time. If comprehensive reading or a multiple-text system is used instead of a single text, pupils with a wide range of abilities can profitably study a given unit together. The range of average ability and maturity from tenth to twelfth grade is less than that within one grade from upper to lower quarters.

This science program should of course be required of all pupils. Nobody can live in the world today without contact with and some understanding of science. The junior-high-school pupil should be required to take three years of general science; the senior-high-school pupil three years of science selected from functional units patterned to meet his own personal needs.

It can safely be predicted that unless the science curriculum is made

more appealing to the normal pupil and more functional in daily living, not only will the school science program suffer, but eventually our technological civilization itself will pay the penalty for the inability of educators to meet the challenge of scientific progress.

[*Victor C. Smith is Head of the Science Department, Ramsey Junior High School, Minneapolis, Minnesota. Reported from* Secondary Education, *XII (November, 1944-January, 1945), 4-8.*]

Current Quotations:

Willis A. Sutton, former Superintendent of Schools, Atlanta, Georgia: "There is great danger that we might win technical liberty for the world yet lose it ourselves. We might get political liberty for Greece or some other country yet have one-third of our people of America under racial, religious, or political prejudice."

John W. Harbeson, Principal, Pasadena, California, Junior College: "The average educational attainment of the men and women in the armed forces is the tenth grade. The average returning soldier, therefore, will be both too mature for the high school and inadequately prepared for the standard college and university. The junior college, therefore, occupies a strategic position for service to the returning veteran."

Roger W. Babson, Business and Financial Writer: "We want a higher standard of living; but we cannot raise the standard of living without first raising the character, health, and intelligence of the people. Who are responsible for the weak moral, physical, and mental condition of the rising generation? Who are training those who must provide re-employment for 30 million veterans and war workers and must pay taxes for billions of pensions and a debt of 300 billion dollars? The school committees of your city and mine are responsible for what is to happen. Too many of them are putting cheap politics and their own selfishness before the good of their communities and returning soldiers."

TWENTY-FIVE YEARS OF RESEARCH IN SECONDARY EDUCATION

HARL R. DOUGLASS

In the Journal of Educational Research

1. *Measurement, teaching, and pupil growth.*—By 1920 investigation in almost every major area of secondary education was under way. While much has been learned in the past 25 years about methods of instruction and learning, by far the greater part is yet to be done. Conclusions of most studies are based on measuring the acquisition of subject matter and skills. Similar controlled investigations need to be made, with more careful control and more complete measurement, of all kinds of growth, such as the development of initiative, ingenuity, clear thinking, ability to apply, and interest in further learning.

Investigation of the retention of learning in this period dealt a severe blow to the case for the acquisition of information, indicating that a considerable amount of the detailed subject matter acquired could not be recalled a few months later, while skills, habits, principles, and concepts once acquired were to much greater extent retained.

2. *Student personnel, prognosis, and youth problems.* — Considerable useful knowledge has become available as to the relationship between various factors and success in high school. While intelligence and achievement tests have proved to be somewhat useful, particularly for equating groups of 15 or more and for comparing their abilities, it has been found that teachers' marks and scores on specialized prognostic and aptitude tests are more valid. Prognosis, however, is more accurate when a combination of two or more predictive bases are employed.

Investigations are showing more and more clearly that the students who do not finish high school are of lower economic status and less intelligence on the average but that many are also eliminated whose scores are average or better in intelligence but who have less than average interest in school studies.

3. *The curriculum and extra-curriculum.*—With respect to the curriculum the yield has not been greatly gratifying. It is difficult adequately to measure growth or attainment by means of subject-matter tests, and thus to assess the relative effectiveness of different courses of study. Only recently have more comprehensive means of measurement been available.

Among the more notable contributions in the field of curriculum have been the definite and almost uniform findings of a score of studies to the effect that marks made in college are practically unrelated to the pattern of courses taken in high school.

Useful data for course-of-study

makers have been afforded by the analyses of the activities performed in different occupational situations; by surveys of the knowledge or other things needed by people in the home, in citizenship activities, etc.; and by surveys of the vocabulary and contents within specialized fields of newspapers, periodicals, political platforms, textbooks, etc. Terminal vocational and general education and cooperative work-study plans have been the subject of nation-wide study and experimentation in the last decade.

Investigations have revealed the necessity for more time and attention to continuing in high school the development and retention of the three R's. Sufficient research has been done to indicate that participation in extracurricular activities interfered not greatly with scholastic success as judged by marks, and that, with the exception of athletes, those who participated in extracurricular activities were as a group superior in intelligence and in economic status to those not participating and as groups were more successful vocationally.

4. *High-school organization and administration.* — Very much the same things may be said of the objective approach to problems of school organization. In investigations, for example, of the relative effectiveness of the junior-high-school organization and of the 8-4 plan, no considerable or statistically significant difference could be discovered.

5. *Education and activities of the staff.* — A wealth of data has been accumulated relative to practices in the preservice education of teachers as has useful information relative to the status, subject-matter preparation, and assignment of teachers, and the characteristics of the superior teacher.

6. *Recent trends in research procedure.* — The methods employed in the investigation of problems in secondary education have undergone significant changes in the last decade or so. More and more use is made of the expert opinion of men and women of considerable experience with the problems or items under investigation — the use of juries of experienced experts. The questionnaire and check list have been improved and used more widely, particularly for the purpose of gathering facts as to status or practice. Reliance on measurements of the narrow subject-matter information and skill type has weakened and research workers are turning to measurements calculated to measure status or growth.

[*Harl R. Douglass is a member of the faculty of the University of Colorado. Reported from the* Journal of Educational Research, *XXXVIII (January, 1945), 346-50.*]

SIMPLIFYING A CROWDED SCHEDULE

PAUL B. DIEDERICH

In the School Review

EVERY 40 minutes in high school, pupils rush to another classroom to study something which has no connection with anything else in the school day. When adults have to rush all day long from one thing to another, without any connection between the activities, their nerves are worn to a frazzle at the end. Is that the atmosphere in which we want our children to grow up?

The most serious outcome of this arrangement of the school day is that pupils are torn apart by many diverse and conflicting stimuli. So many teachers, each smitten with zeal to get as much of his subject as possible into pupils, put forward more demands each day than a healthy young animal can assimilate. Even steel gets tired and loses its elasticity after ten thousand hammer blows in rapid succession. The pupils become tense, jittery, explosive; in the gymnasium period they go off like a bent spring. If we add to these stimuli the increasing tempo of life outside school—a life filled with radio, movies, comic strips, sports, dates, parties, dances, automobile riding, and the like—is it any wonder that our pupils have literally no time whatever to consolidate their gains, to grow up, to think? Are we surprised that they find in raucous "swing" music the perfect image of the habitual state of their souls? Can we blame anyone but ourselves for producing a generation of young people who, for all their virtues, are obviously overstimulated, unintegrated, superficial?

The only hopeful element in the picture is the probable postwar situation in the high school. In predicting this situation, we have to take into account the following facts. First, several careful studies have indicated that enrolment in college will at least be doubled. Colleges, after a comfortable expansion, will meet the situation simply by rejecting a higher percentage of the candidates for admission. Second, the University of Chicago has cast a powerful stone at the present structure of the liberal arts college by granting the bachelor's degree at the end of the usual sophomore year and by adding the last two years of the usual high school to its college program. Third, with this precedent to support them and with an unparalleled demand for college training, will not superintendents of schools in the larger cities take advantage of the opportunity to extend their program through Grade XIV—with or without the bachelor's degree at the end of it?

Until new buildings can be built, the easiest way to take care of an influx of students beyond Grade XII will be to turn the present

senior high schools into four-year colleges, beginning with Grade XI. Then the junior high schools will have to become four-year high schools, covering Grades VII through X. This solution fits the pattern established by the University of Chicago, and it makes sense. To set up three separate administrative units for this period of schooling, each covering only two or three years, does not make sense.

When this possibility is considered, the usual focus of attention is on what may happen in the program of the new city colleges. But the really exciting prospect is what may happen in the program of the new four-year high school. Such changes are not completely predictable, but there are three facts which should influence them. First, the changes will be made by junior-high-school teachers who have been, by and large, more interested in children and less in subjects than have their brethren in the senior high school.

Second, the new program will not be dominated by the old bugaboo of college-entrance requirements because no tradition of requirements for admission to Grade XI has ever been established, and public schools are in no mood to create one. The Eight-Year Study and similar investigations have demonstrated that such requirements are unnecessary and probably harmful.

Third, the need of the moment will be for the greatest possible simplification — for "streamlining." Schools will be under terrific pressure to do twice as much as they have been doing with no immediately available increase in facilities and with relatively little increase in staff. Any proposal which will reduce the needlessly diversified offerings of high schools and will take care of large groups of children with relatively little supervision will get a hearing.

The following proposal is based on fifteen years of experience as a teacher, examiner, and consultant on the programs of high schools in all parts of the country. The main features of the program are only combinations of activities which I have seen carried on successfully with pupils by run-of-the-mill teachers in ordinary schools. They are not pipe dreams. They are activities which our present teaching staff would be able to direct and which the better teachers would like to initiate.

There ought to be four main divisions of the program, which might be scheduled from nine to half-past ten o'clock, from half-past ten to twelve, from one to half-past two, and from half-past two to four.

The first division of the program might be called the core course. Its chief aim would be to study how we get the things we need—from food, clothing, and shelter up to freedom, justice, knowledge, and beauty—and how the rising gener-

ation could do a better job. It would study how the work of the country is organized and carried on, what are some of the major unsolved problems, what solutions have been proposed, and how they have worked wherever they have been tried. It would investigate vocational opportunities in the fields studied and the training needed in order to make a contribution in these fields. In the course of this survey, carried on with a lavish use of films and trips into the community, pupils would learn a great deal of science and social studies, and the English teacher would have to help with the problems of reading, writing, and speaking which would be involved. The basic skills in arithmetic would also come in for considerable exercise. The major outcome, however, would be a sense of sharing in a great cooperative endeavor to get the things we all need. Pupils might come to look on a career as a contribution to the common welfare, rather than as a mad scramble to "get to the top" over the prostrate bodies of everyone else—merely for the sake of getting to the top.

The core course would be the equivalent of the New England town meeting for the pupils enrolled in it, and it could deal with any problem that needed attention. The units on common needs would, however, form the backbone of the program.

The second division of the program would be a large general shop with equipment for work in science, industrial arts, fine arts, crafts, home economics, music, and the theater. While this combination is more extensive than any I have seen, the component parts of the combination have all been worked out to mutual advantage. Teachers of the arts and industrial arts have long deplored the traditional separation of shop and studio. The theater has always required the cooperation of all the arts in the school program. If we could bring all this equipment together—possibly with movable partitions to separate the various types—all the teachers involved would find the arrangement mutually advantageous.

Work with the hands is a necessary counterpoise to purely intellectual activity. Heretofore it has been "pushed around" by the academic subjects, used as a dumping ground for inferior pupils, and pent up in forty-minute periods, which are wildly frustrating to creative work.

The third division of the program would be "free reading" in a vastly expanded school library. The schools might well unscrew the desks from the floors of about half of the usual classrooms, move in rainbow-colored canvas deck chairs, and build goodlooking modern bookshelves around the walls, This is the age for reading. The amount of reading uniformly reaches a peak in the junior high school; it declines

thereafter with each increment in age and education. Two thousand dollars, the salary of one mediocre teacher for one year, if invested in books will do the work of several superior teachers for several years. The free-reading program would not, however, put teachers out of work. There might be several teachers in a large library, holding conferences in glass-partitioned offices, talking over what had been learned from books, discovering and correcting reading difficulties, and building new interests in reading.

The free-reading rooms might also have a row of soundproof phonograph booths and an extensive library of records. The better radio programs, d i s c r e e t l y controlled from a central source, might also be heard in these booths. At least one booth should have a recording machine for speech correction.

The fourth and last division of the new high-school program would be outdoor play. Since it is the primary business of young people to grow up, and since they probably develop more of the important traits of character on the playground than anywhere else in school, this ample provision for play should require no justification. It contrasts sharply, however, with the two short periods a week in a damp, smelly gymnasium which are standard in most small American high schools. The way we treat the bodily needs of young people at this age, with all the ferment of adolescence in them, is hardly less than a crime. We make them sit on hard chairs six hours a day listening to other people talk. When teachers have to endure such a program at an educational convention for even two or three days, they feel thoroughly abused. No wonder we have trouble with discipline.

These four divisions—a core course, a general shop, free reading, and outdoor play—should constitute the entire program of the new four year high school. Modern schools have already discarded the notion that one needs a great array of courses in order to cater to "individual differences." The differences which matter can be cared for better in the broad, free, varied activities that I have described than in any number of electives. Life is not so complicated that we need a wider array of courses to prepare for it or to live it well.

Paul B. Diederich is Assistant Professor of Education and Examiner in the Office of the University Examiner at the University of Chicago. Reported from the School Review, *LIII (March, 1945), 162-9.*

THE SCHOOLS AND AMERICAN-SOVIET UNDERSTANDING

CORLISS LAMONT
In Social Education

THERE has been a growing realization that one of the prime objects of American schools and colleges should be to acquaint students with life in other countries and to reach out beyond the mere facts to encourage cooperation with other nations for peace, disarmament, and international trade. Unless we have specific education for peace, not war, in America and other nations, there will be war, not peace.

Clearly it is up to American educators to implement the recent agreements at Dumbarton Oaks toward international cooperation. In working for and educating for international cooperation and security, Americans can combine both hard-headed practicality and their natural idealism. For a world of truly united nations is an imperative of good business, wise statesmanship, and the moral precepts of New Testament Christianity and related philosophies of life. The highest sort of American patriotism is that which seeks the welfare of our people and all the rest of mankind through a warless world.

In this picture of one united world and one united humanity, good American-Soviet relations must be considered a cornerstone, perhaps *the* most fundamental cornerstone. But those relations will not remain satisfactory without mutual understanding. And America's general surprise at the magnificent Soviet showing against the Nazis proves how misinformed we in the United States were about our Soviet ally.

Students on the secondary-school level have not been getting even the elementary facts about the Soviet Union, partly because inadequate time, or no time at all, is given to that subject in the curriculum and partly because what has been taught is chiefly misinformation gleaned from hostile sources. It might be said that the schools of the United States are only just beginning to grant recognition to the Soviet Union.

This situation must be rectified if American schools and school teachers are to play their proper role in education in other countries besides our own, in world cooperation for peace, and in the important topic of American-Soviet relations. I know that on the whole it will not be possible to introduce separate courses on the Soviet Union, except possibly on the Russian language as such. Hence study of the USSR must be worked into courses on literature, the arts, science, current events, and the social studies. I believe the accepted word for all this is *infiltration*. That also includes infiltration of basic Soviet materials into

the school libraries. Here there has been a great lack. And I am afraid that most of the books on Russia already in such libraries are either bitterly antagonistic or out of date or both.

How absurd it is to feel that only those who hate Soviet Russia are qualified to write objectively about it. These are precisely the authors who so misled America about USSR. And incidently, there is room for much more utilization of original Soviet sources like the writings and speeches of Lenin, Stalin, Litvinoff, and others. I do not mean for a minute that I wish to exclude criticism of the Soviet Union. In fact, I refuse to recommend any general bibliography on the subject that does not include some of the classic critical books like those of Eugene Lyons, Max Eastman, or William Henry Chamberlin.

In the field of Soviet studies what are some of the main topics, both simple and significant, that might well be taught in our schools?

1. The history of American-Russian relations.

2. The fundamental similarities between the United States and Russia.

3. The different races and nations of the USSR.

4. Soviet geography, physical and economic.

5. The various kinds of democracy in the Soviet Union.

6. Literature, the arts, and science in Soviet Russia.

7. The Soviet search for peace and collective security.

8. Bibliographies and other teaching materials.

Misunderstanding and distrust between Soviet Russia and the western democracies was a prime factor in bringing on this Second World War. Neither America nor mankind at large can afford the material and spiritual and human costs of another vast international conflict. It must not happen again. And so important is the United States in the world situation that it will not happen again if American education plays its proper part during the coming years of postwar reconstruction.

[*Corliss Lamont is Chairman of the National Council of American-Soviet Friendship and has taught courses on the Soviet Union at Cornell and Harvard Universities. Reported from* Social Education, *IX (February, 1945), 63-64.*]

THE ARTS IN AMERICAN EDUCATION

JAMES L. MURSELL

In the Teachers College Record

THE gap between the individual, social, and cultural significance of the arts and their practical educational recognition is fantastic. The arts have always been of the utmost importance in abundant and civilized living. Hence, they should have a commensurate place in any scheme of general education which contemplates such a way of life. All sensible educators—and they are in the vast majority—are likely to agree, but in spite of many verbal bouquets, they seem to do very little about it.

Probably the main reason for this passivity is that they do not know what to do. Workers in the arts, who should have told them long since, have been content merely to grub along in their specialties, without developing any comprehensive and well-founded plan which would make sense to outsiders.

As a very humbly offered corrective, I propose to outline what seems to me a reasonable scheme for the arts in general education. Even if it fails to win assent it may help to focus discussion, which at least is something.

The starting point must be a fairly clear notion of what the arts are and what they are for. Summarily put, the arts are and always have been the instrumentalities by which emotional values and meanings become explicit, objective, public, communicable. In a nutshell, the arts are the vocabulary of the emotions.

Let us turn at once to the chief educational implications of this point of view.

1. When the arts are pushed into a minor place in the curriculum, it is not the arts themselves that are being ignored. It is the emotional side of human life. The human spirit, it has been well said, has two wings, the intellect and the arts. But our schools seem satisfied to develop generation after generation of one-wingers. When it is intimated that man is not so rational as pedants seem to think, and that an emotional cripple is quite likely to be a civic cripple, there is hearty agreement, but the whole problem is dumped in the laps of school psychiatrists, guidance workers, and similar rescue squads. Yet there is a whole vast area of culture, pitiably unexploited, which bears precisely upon the problem and always has.

2. Another obvious consequence of our controlling aesthetic viewpoint is that the arts cannot be intellectualized without being denatured. The inveterate and multiform tendency to drag the arts at the chariot wheels of the intellectualized curriculum is thoroughly destructive. They must be allowed to stand on their own feet and to do their own work in their own way.

3. The primary integration of the arts is not with any intellectual discipline whatsoever, including history, but among themselves. By integration we should by no means understand some circus-like yoking together of pedagogical horses, camels, monkeys, and elephants. Integration starts, if it ever really gets going at all, with the working staff, who develop a common viewpoint and a common policy and who learn year by year ever better how to bring to bear a common and unified influence throughout the whole complex of their endeavors. Such is the key idea of a coordinated art program, and in this whole connection the great lack so far has been in key ideas.

Very well, let us suppose we have a group of workers who have adopted this central doctrine. What are some of the things they will probably try to do?

1. They will try to promote individual artistic creative activities on the part of their pupils on the most ambitious scale possible. For one possesses the arts not by learning about them or casually scrutinizing them in connection with something else, but by becoming an artist oneself.

2. Next our group will seek to promote activities in the way of artistic participation, again on the most ambitious and varied scale. This means performing music, acting in plays, taking part in dance patterns, and the like. The experience of actually projecting works of art, in one's own proper person and through one's endeavors, is another essential means of getting hold of the arts as personal and intimate possessions.

3. Our group will wish to promote appreciative experiences on the most comprehensive scale possible. Appreciation, like creation, is a weasel word and needs a protecting definition. It means listening to, looking at, reading, reading about, and discussing works of art. Appreciation is another essential avenue to the personal possession of the arts. It means precisely the building of instructed and discriminating value judgments about works of art. Other disciplines and modes of approach may help, but they are not substitutes.

Such, in very briefest outline, is how an adequate program of art education would probably look. Creation, participation, appreciation—these are the three main pillars of the structure. They all arise from a common foundation, which is the claim that the very essence of the arts and of the aesthetic process is the objectification of emotional values.

Any group of workers wishing to put into practice the plan outlined above will have to ask for plenty—changes in budget, in schedule, in credit allotment, and so forth. So be it! Much needs to be changed if the arts are to do in the schools what they have been doing in the

world at large since the days of the caveman. Why not recognize this fact? If the plan seems very ambitious, let it be remembered that any worthwhile plan for the arts, as matters now stand, *must* be ambitious.

As to budget, there is no doubt that impressive increments would be involved. Well, the science people shouted for laboratories and got them. The vocational people shouted for shops and got them. These clamors were effective mainly because there was a sound educational idea back of them. Once the art people have advanced a sound central educational idea for themselves—and the idea of building emotional literacy in young people is eminently sound—they also would be well advised to do some shouting.

As to schedule, it must be understood that any curricular undertaking can be sterilized if it is denied sufficient time. The same principle holds true for the arts, on a far larger scale. What our group will want is nothing less than a clear 25 percent of the pupil's total time in school from kindergarten through the twelfth grade. A halfway adequate cultivation of the hemisphere of the arts would in a very short time bring forth fruits so novel and beneficient that we would catch ourselves rubbing our eyes and wondering what we had been thinking of to neglect it.

As to credit, the key point is that valid artistic activities cannot be marked or graded, and that the more significant they become the less this is possible. In the arts, the student has to deliver. Success, failure, progress, retardation, achievement—all are inescapably visible or audible. That is a dynamic far more potent and inexorable than any that can be distilled from the normal probability curve.

These and other implications that could be mentioned are certainly ambitious, but I do not believe they are fantastic. Educators have wasted much time wrinkling their brows over what to do about the arts, but they have seldom faced the basic issues in large terms. They have looked for small answers and never found them, because the only real answer is a large one.

[*James L. Mursell is Professor of Education, Teachers College, Columbia University. Reported from the* Teachers College Record, *XLVI (February, 1945), 285-92.*]

TEN percent of college students have speech defects, according to the Cornell University Speech Clinic.

A METHOD FOR THE SELECTION OF INDUSTRIAL-ARTS ACTIVITIES

GORDON O. WILBER

In the Industrial Arts Teacher

EVERY great struggle through which civilization passes has been followed by a period of readjustment, growth in certain areas, and the rejection of many previously accepted values. Any type of education which cannot be justified on the basis of sound theory and philosophy understandable to the taxpayer and politician is likely to find itself repudiated and ignored. It behooves the leaders and friends of industrial-arts education, therefore, to make sure that there can be no question concerning the value of this subject in the school curriculum.

On paper at least, industrial arts can hold its own. The growth of technology, the increase and complexity of manufactured goods, the probable increase in leisure time following the war—these and many other developments point to the need for a type of education which will orient youth to living in an industrial age. Likewise, the accepted objectives of industrial-arts education—exploration, consumer literacy, avocational opportunities, aesthetic appreciation, social relationships, and all the rest—are unquestionably sound. The trouble is likely to arise when teachers, supervisors, and administrators are asked to show proof that these objectives are being met. In order that industrial arts be placed in a thoroughly justifiable position, three steps should be taken: (1) agreement on aims and objectives to be obtained, (2) a logical method for the selection of subject matter and activities, and (3) an effective program of evaluation. It is the purpose of this paper to discuss the second of these steps and it will, therefore, be assumed that the first has been, or can be, accomplished.

Several diverse methods are now being used for the selection of industrial-arts activities. Among these are the "trade analysis technique," which lends itself well to the development of tool skills, but neglects, or attains only incidentally, all other objectives; the "student interest" method, which provides adequate stimulus to make the work vital and interesting but precludes any possibility of attaining predetermined objectives, except as they happen to be accomplished by the activities chosen; and the "teacher interest" approach, where teachers carry into the classroom the enthusiasms of their particular hobbies and avocations with often a resultant narrowing of interest for the entire class.

The course of study or syllabus approach to selection is also commonly used. Many teachers, not sure of their own objectives, or finding themselves in a system where

they are required to follow a course of study, resign themselves to a blind worship of prescribed activities. The value to be derived from such procedure is, naturally, dependent on the thought and method which went into the original plan, and the extent to which individual teachers are able to translate into actuality the ideas and outcomes which the person responsible for the syllabus had in mind. It is certain, however, that when a ready-made course of study is slavishly followed the work cannot rise above the level which was originally built into it and at best only those objectives which served as a basis for constructing such courses can be attained.

There is also the chance and inspiration method. Many teachers are more or less guilty in this respect. They see a project in a magazine or a piece of furniture in a store window, and without much thought as to whether it fits in with their objectives they immediately introduce it to their group as a class or individual project. Again it is doubtful whether such a procedure can accomplish much toward attaining objectives.

This survey of methods indicates that, whereas each may have its own merits and weaknesses, all fall short when measured against the yardstick of attainment of all of the objectives commonly accepted for industrial-arts teaching. *Now the attainment of an objective clearly means that a change must have been made in the students' behavior.* If a student fails to behave differently in regard to any particular objective after he has completed a given course then that objective has not been attained. It appears, therefore, that a direct frontal attack should be made on this problem. To the writer's knowledge no such direct approach has ever been made in this field. Is it not time that we analyze our objectives fully and carefully in terms of the definite changes in behavior which we desire, so that both teacher and student may know the direction in which we are trying to move?

By way of example, let us consider the commonly accepted objective "to develop desirable recreational and avocational activities." Just what does this mean in terms of specific behavior changes? A few typical ones might be: (1) The student reads such magazines as *Popular Mechanics, Home Craftsman,* and *Popular Science.* (2) He develops a home workshop. (3) He asks advice on how to carry on constructive activities out of school. (4) He beomes interested in one or more constructional hobbies. (5) He spends spare time in the shop either at school or home. (6) He asks questions and talks about his hobbies. (7) He consults catalogs for information about supplies and equipment. (8) He contributes to class discussions with information gained from reading along lines of his interests. (9) He takes the

initiative in visiting industries along the lines of his interest. (10) He makes the acquaintance of, and forms friendships with, others who have similar interests.

These are only a few of the many desirable outcomes which will occur to any teacher. They indicate, however, a method which might be used in analyzing each of the accepted objectives of industrial arts.

Once a list such as this has been developed, the next step is the selection of projects, activities, and lessons which will bring about these changes. Without making any pretense of a complete listing, the following activities are suggested as examples of many which might be expected to promote growth toward the behavior changes mentioned above: (1) Display pictures of home workshops. (2) Make available in the shop, books and magazines dealing with hobbies and home workshop activities. (3) Demonstrate processes and projects suitable to the home workshop. (4) Promote an exhibit of work done at home or outside of school. (5) Talk with individual students about their hobby interests. (6) Allow students in school to make equipment and tools which can be used in the home workshop. (7) Have each student look over his house and select a possible location for a shop and then develop floor plans for it. (8) Develop competition in popular hobbies such as model airplane contests, model boat racing, archery tournaments, etc. (9) Visit home workshops and advise with students concerning improvements. (10) Provide exhibits in the school which will inspire new hobbies. (11) Promote a hobby club where students may develop new interests. (12) Write newspaper articles about certain students who have developed unusual hobbies or done outstanding work.

It seems apparent that if a program such as this were developed, it would inject a vitality into industrial-arts work which in many cases is now lacking. It would have the further advantage of pointing directly toward the achievement of accepted objectives, and would thus be a basis for sound evaluation of progress. There can be no better way of achieving a strong position for industrial-arts education than through a program which (1) is based on sound objectives, (2) can show that these objectives have been carefully and honestly analyzed in terms of desired behavior changes, and (3) includes activities, projects, and lessons directed toward bringing about these changes.

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LIBERAL EDUCATION AFTER THE WAR

WALTER R. AGARD

In the Journal of Higher Education

IN colleges and universities all over America, faculty committees are now at work revising curriculums for students — especially returning servicemen—after the war. Many of the men now in service will not be satisfied with what colleges have been offering; they will be too mature and too richly and tragically experienced. Moreover, when we win this war there will be little of the facile optimism we felt after the first World War; we know there will be no simple solutions of the difficulties we shall face. So there is an urgency about this educational planning which was unknown in the leisurely curriculum revision of the interwar years.

For liberal colleges the situation is especially challenging. The value of their type of education has been questioned, explicitly or by implication, in comparison with the unquestioned utility and need of technical training. Educators realize that changes which they have thought, talked, and temporized about—and sometimes cautiously adopted—in recent years must be put into effect with vigor and courage if liberal colleges are to win the support and play the part they should in our difficult days of reconstruction.

Now, it is futile to plan what such education should be except in terms of the kind of society it must serve. That society has been suffering from three major maladjustments. The first is provincialism, a lack of sufficient perspective in space and time. We are only now coming to realize the danger of regionalism and the need for thinking in global terms. Many of us have hardly yet come to realize that our world cannot be understood or its institutions appraised merely in contemporary terms, and that (in Walter Lippmann's phrase) "the past can be a way to freedom," liberating us from many prejudices, some of them trivial, others tragic.

The second maladjustment is overspecialization. We have been training persons to become merely Jacks of one trade. The more they become masters of it, the less they may be masters of themselves; and, more serious still, the less they may know or care about the problems that cut across all trades. Yet for the solution of these problems a democracy like ours must rely on over-all interest and knowledge.

The third maladjustment is emotional escapism. Baffled by the complexity of modern life, unable to understand it, people have tended to give up trying to do so, to surrender their judgment and "think with their blood," to follow some leader who would save them from the task of making up their minds.

It is, of course, always easier for education to follow the trend of a time than to criticize and guide it. So it is not strange that these same maladjustments appear in our institutions of higher learning. Even so-called progressive schools have laid stress on developing individual aptitudes rather than on imposing social disciplines or trying to make a serious appraisal of community values.

In order to fulfill its function of criticizing and guiding the trend of our times, our colleges must reaffirm and implement four main aims of liberal education: First, make the student at home in a wide range of human experience, both in space and time, thus broadening his understanding and his sympathies. Second, lead him to feel the urgency and complexity of the most important problems facing him as a citizen of the world today. Third, develop in him, by the example and guidance of the best teachers available, critical attitudes and methods for arriving at sound value judgments regarding this experience and these problems. Fourth, help him to relate his own special aptitudes and interests productively and happily to this experience and these problems, so as to become a well integrated as well as a broad-minded person.

What sort of curriculum can best implement these aims? The standard pattern in American liberal education is a two-year course before specialization begins, based on a modification of the "free-elective system." Every student is required to take at least one course in each of three fields of study: science, the social studies, and the humanities. It has generally been realized, however, that such indiscriminate election within these fields has two shortcomings: the experience it gives is too limited in scope, leaving many important aspects of any field untouched; and there is little or no relationship established between the separate subjects. Many of the courses are frankly tools for later work which the student may have no intention of taking. Can you wonder that he sees no sense in such a program, or that he may become so dispirited that he will want to leave after his first year?

In an effort to make the first two years of college more comprehensive in scope and more stimulating in appeal, some colleges (notably Columbia and Chicago) have substituted for this piecemeal curriculum broad survey courses in the fields of science, the social studies, and the humanities (history, philosophy, literature, and the fine arts). Here the field has supplanted the separate subject. And as Anatole France said, it "sets the spark to the spirit, and students will catch fire where they are inflammable." Here again, however, there is not much relationship established between the three great fields of experience.

The Hutchins Plan, functioning

at St. John's College, is a radical attempt to remedy the shortcomings of these two types of education. It proposes a single, formal course of study for all students in the principles and products of human thinking. It makes use of many of the best documents of the human mind, the "great books," through an analysis of which students may recapture for themselves the attitudes and ideas of the authors. Here there is, at least, an effort to view human experience in a unified rather than a fragmentary way, to find coordinating intellectual principles, to work out a philosophy of life. Its chief drawback is, I think, the tendency to abstract ideas from their social context. The unity achieved is based on too narrow a range of experience, chiefly intellectual and verbal; it is unity of ideas in a vacuum.

A fourth plan, first put into practice in Alexander Meiklejohn's Experimental College at the University of Wisconsin from 1927 to 1932, and recently applied in a very practical way in the Army Area Study classes for training civil administrators of the conquered countries, is based on a different assumption from any of these already described. Since students will be living in communities in which they hope to play as useful and happy a part as possible, it assumes that the best general education for them is the study, not of miscellaneous subjects, fields of interest, or the history of ideas, but of communities.

In the Experimental College, students spent their freshman year making a three-dimensional analysis of the Greece of Pericles and Plato; in their sophomore year they made a similar study of American culture. The studies were carried on by posing problems which had to be considered from a comprehensive point of view. For instance, the paradox of a domestic democratic policy and a foreign imperialistic one in ancient Athens could be understood only by examining the whole intricate network of Athenian institutions and purposes. In modern America, an urban housing program was revealed as a highly complicated matter, involving geography and economics, government, sociology, and psychology, as well as engineering and architecture.

As a result of such experiments, I venture to predict that following ing the war some of our colleges will make similar plans for the liberal education of their students. Of course, a wide variety of choices may be offered, but it seems to me that the freshman year should capture the students' interest by concerning itself with contemporary American life, and the sophomore year should offer the study of several contrasting foreign and past cultures, among which a student might choose in accordance with his individual aptitudes and interests. Both would include physical factors, the framework of relevant historical events, the chief political, economic,

and social problems, the great literature and artistic expression, the scientific, philosophical, and religious interpretations of life.

This plan, too, has its manifest shortcomings. It limits the student's study of past experience to one great period; it lacks the precise discipline of a single, clearly defined course; and it requires pioneer teachers, eager and able to work together. But it is far more important to arrive at an integrated understanding of two great cultures than to get any amount of fragmentary information; and the selfimposed discipline that comes from the enthusiastic grappling with a great human situation is far more valuable than discipline imposed by a teacher. Such a curriculum has great possibilities for training students to share fully and constructively in the life of the communities in which they will live.

Colleges will doubtless differ widely in the direction which their postwar curricular planning will take. We do not want—and certainly do not expect to have—any rigid uniformity in American education; no single plan will adequately meet the needs of all students. But what we may reasonably expect is that college administrators and teachers will have the initiative and insight to work out curriculms which will help to remedy the maladjustments of our contemporary society, which will equip students for responsible, intelligent, and courageous citizenship in the world that will be theirs.

[*Walter R. Agard is Professor of Greek in the Classics Department, University of Wisconsin. Reported from the* Journal of Higher Education, *XVI (February, 1945), 57-62.*]

THERE have been fights and fracases at Cleveland's Glenville High School recently. Newspapers described these scuffles as "inspired by intolerance and prejudice" among the students of varied racial and religious backgrounds. Recently students acted to confound the newspapers. They elected a student council consisting of William Leblang, Jewish, president; Arthur Sasahara, Japanese-American, vice-president; Patricia Corbett, Irish descent, secretary; and Randy Wright, Negro, treasurer. Arthur, the Japanese-American, won his office by the largest majority of votes.

PERSONALITIES: **John M. Tobin** has been elevated to the superintendency of the Cambridge, Mass., schools to succeed **Michael E. Fitzgerald** who resigned because of ill health. . . . **John M. Stalnaker,** professor of psychology at Princeton University who has been on leave as director of the Army-Navy College Testing Program, has been named dean of students at Stanford University. . . . **John E. Whitcraft** of Alfred University has been appointed associate business education supervisor with the New York State Education Department, Albany. . . . **William Mather Lewis** has tendered his resignation as president of Lafayette College, Bethlehem, Penna. . . . **Howard S. McDonald,** superintendent of the Salt Lake City, Utah, schools, has been named president of Brigham Young University, Provo, Utah. . . . **Henry C. Morrison,** professor emeritus of education, University of Chicago, died March 19 at 73 years of age. . . . **B. F. Skinner,** associate professor of psychology at the University of Minnesota, has been appointed professor of psychology and head of the department at Indiana University. . . . Election of officers of the American Association of Junior Colleges has resulted in the naming of **Lawrence L. Bethel,** director of the New Haven, Conn., YMCA Junior College, as president and **Roscoe C. Ingalls,** Los Angeles, Calif., City College, as vice-president. **Walter C. Eells** continues as executive secretary. . . . **J. E. Wallace Wallin** will retire this year as director, division of special education and mental hygiene, Delaware State Department of Public Instruction. . . . **David Friday,** former president of Michigan State College of Agriculture and Applied Science, died last month at 68 years of age. . . . **George C. Dietrich,** former superintendent of the Piqua, Ohio, schools, died recently. . . . **Clifford Dean** has resigned as superintendent of the Lawrence, Kansas., schools. . . . **John L. Seaton** will retire September 1 from the presidency of Albion, Mich., College. . . . **Sir Percy Nunn,** British educational leader, died recently.

THE Senate Committee on Education and Labor has been holding hearings on the federal-aid-to-education bill introduced by the American Federation of Teachers which is affiliated with the American Federation of Labor. The bill provides for an annual appropriation of $300,000,000 to "assist the states in more adequately financing their systems of public education, by supplementing currently available state and local funds for educational purposes, and to equalize educational opportunities among all children in public and nonpublic schools; to eradicate illiteracy; and to promote national security and general welfare through

the development of education." Also included is an appropriation of $100,000,000 "to promote the health, welfare, and safety of school children by providing for . . . transportation, library facilities, textbooks and other reading materials, visual aids, school health programs, and other necessary educational projects." An additional appropriation is made in the bill of $150,000,000 "for needy persons between the ages of 14 and 20, to enable them to continue their education." Matthew Woll, vice-president of the AFL, testified in favor of the provision of the bill permitting the distribution of money to private and parochial schools. However, Floyd W. Reeves of the University of Chicago who testified for the Commission on Educational Reconstruction of the American Federation of Teachers opposed this proviso in the legislation, according to press reports.

ANNOUNCEMENT has been made that Princeton University will offer the Associate in Arts degree for exservicemen who feel that they can spend but four semesters in college before beginning their life work. Two types of curriculum are being offered. One provides for a broad general training in the arts and sciences, including engineering, somewhat similar to the present freshman and sophomore years. Entering students with two semesters of college credit can elect a more specialized program.

OVERHAULING the G. I. Bill of Rights educational provisions in three important aspects is recommended by the Working Conference on the Educational Program for Veterans of the National Education Association. The Working Conference, composed of representatives from all government and private agencies having to do with veterans, held its sessions recently at NEA Washington Headquarters. Its major recommendations included:

1. Increase of subsistence allowances for veterans with dependents while going to school. Suggested rates of compensation are: $50 for a veteran without dependents; $75 for a veteran with one dependent; $100 for a veteran with two dependents; and $125 for a veteran with three or more dependents. At present, the law provides for $50 to a veteran without dependents and only $75 for a veteran "if he has a dependent or dependents." In other words, the number of dependents is not taken into consideration.

2. Repeal of section 1505, so as to increase the number of veterans applying for educational benefits. The section provides that "in the event there shall hereafter be authorized any allowance in the nature of adjustment compensation, any benefits received by, or paid by, any veteran under this act shall be charged against and deducted from such adjusted compensation. . . ." Some educators have maintained that this

clause discouraged many veterans from taking advantage of schooling opportunities, since veterans fear that any allowances paid out for education would be deducted from future bonuses which Congress might grant them.

3. Making the school benefits available to all veterans, whether their education was interrupted by the war or not. At the present time, the law assumes that only persons 25 years of age or younger have had their education interrupted.

Presumably addressing the three above points to Congress, the Working Conference also addressed a series of recommendations to the Veterans Administration and to state departments of education.

Among suggestions to the Veterans Administration:

1. "We recommend that the regional and branch offices of the Veterans' Administration take particular care to see that regulations affecting Title II be communicated promptly to all interested educational agencies, both public and private.

2. "We recommend that, in administering the requirement that the Veterans' Administrator shall approve changes in the educational programs of veterans, the advice of the institution at which the veteran is studying should be obtained and be given substantial weight and consideration.

3. "We recommend that definite provision be made to pay for the education of veterans who desire to take a course of study involving less than three semester hours a term in college or less than six hours a week in high school or other training of less than college level.

4. "In areas where there is a substantial number of veterans of the minority groups to be served by the educational program, there should be included on the staff dealing with these educational opportunities a person thoroughly conversant and sympathetic with the problems of such minority groups."

And to state departments of education the Working Conference recommends addition of one or more persons to the staff "whose duties shall be to encourage and promote the adaptation and development of educational programs to meet the needs of veterans, especially of veterans of less than college grade. Such personnel should work in close cooperation with the federal Office of Education and the Veterans' Administration." An Action Committee, headed by Howard Dawson of the NEA, was appointed by the Working Conference to follow up on its recommendations.

THE E Bond goal of the Seventh War Loan is the largest yet, $4 billion! To meet this record war financing requirement, the Treasury Department is counting heavily

on two factors: first, an extended accounting period to include April sales; and, second, the demonstrated sales effectiveness of the nation's school children. (Three percent of the nation's bond buyers bought extra bonds at the schols in the Fourth War Loan; 8 percent in the Sixth.) Two big War Loan assignments can be undertaken by nearly every school: (1) Enroll at least 90 percent of the students as regular savers, thus qualifying for the Schools-at-War flag; (2) teach the basic facts about War Bonds and send that information home. The dates of the Seventh War Loan suggest a variety of promotions: War Bond admission to the spring concert or senior play, War Bond information through the May Day patriotic pageant, War Bond sales to parents for graduation gifts, War Bond school reports at Commencement ceremonies, etc. For further suggestions consult local or state War Finance Committees. The school record in the Sixth War Loan (as revealed by a special survey) speaks for itself: (1) 20,140,000 people heard about the Sixth War Loan from school children—most from their own children, but a third from others. (2) 11,130,000 people were asked by school children to buy (including 3,180,000 who were approached in no other way). (3) 1,595,000 people bought their extra bonds at schools. (4) 90 percent as many people bought extra bonds from children as from adults.

JUNIOR-COLLEGE leaders, by more than a four-to-one vote, favor delaying decision on the question of adoption of a policy of universal military service until after the establishment of peace, according to a nation-wide survey just completed by Walter C. Eells, Executive Secretary of the American Association of Junior Colleges. Replies were received from more than 750 junior-college administrators and faculty members in over 200 junior colleges in all parts of the country. By more than a nine-to-one vote, they favor the appointment of a widely representative national commission to study the matter and make recommendations. They are almost equally divided, however, on the wisdom of a peacetime policy of universal military service if a decision must be made now. On this question, 41 percent of the colleges favored it, 44 percent were opposed, and 15 percent said they were uncertain. If universal military training is to be adopted, however, they are strongly opposed to granting exemptions to any classes of young men, even to conscientious objectors. A majority favor a single period of 12 months devoted exclusively to military training without an effort to combine with it vocational training and general education and believe such a program should be entirely under the supervision of the armed forces. A policy of universal military training would affect junior colleges particularly, since the great

majority of their students are in the 18- to 20-year age group.

THE Committee on Teacher Education, the American Council on Education's newly appointed group charged with the responsibility for further implementing the work and findings of the Commission on Teacher Education, has announced the appointment of Dr. L. D. Haskew as its Executive Secretary. Offices for the committee are located at 525 W. 120th St., New York 27, N. Y., where Dr. Haskew, who is on leave from his position as Director of Teacher Education at Emory University, assumed direction of the Committee's program on April 1. The Committee on Teacher Education plans to devote its major attention to assisting school systems, institutions, and organized agencies with problems involving the recruitment and education of teachers, bringing to bear on those problems the experience of the Commission on Teacher Education and its professional staff. Several volumes reporting and analyzing the Commission's experiences are already available, and additional publications are scheduled to appear this year. Those already published are: *Teachers for Our Times; Evaluation in Teacher Education; Teacher Education in Service;* and *The College and Teacher Education.* Membership for the new Committee on Teacher Education has been drawn chiefly from the former Commission on Teacher Education. Chairman is Professor E. S. Evenden, Teachers College, Columbia University.

FELLOWSHIPS for graduate work in health education are being offered to qualified applicants by the U. S. Public Health Service, in cooperation with the National Foundation for Infantile Paralysis, Surgeon General Thomas Parran has announced. These fellowships for the collegiate fall term of 1945 are being awarded to meet present and future needs for trained health educators in schools, communities, and local, state, and federal health departments. Men and women between the ages of 22 and 40 who are citizens of the United States and who hold a bachelor's degree from a recognized college or university may apply. Fellowships will lead to a master's degree in public health. The 12 months' training period will consist of nine months in the School of Public Health at the University of North Carolina, Yale University, or the University of Michigan, and three months' field experience in community health education under supervision. The fellowships provide a stipend of $100 a month for twelve months, full tuition, and travel for field experience. Fellowship application forms may be obtained from the Surgeon General, U. S. Public Health Service, Washington 14, D. C. Applications must be filed not later than June 1, 1945.

WHAT THE PUBLIC THINKS ABOUT HIGHER EDUCATION

In Fortune

THE following survey was conducted by Elmo Roper of the Fortune Survey in collaboration with the Committee on Postwar Planning of Yale University. The report, however, is solely *Fortune's*.

In addition to the regular survey, a slightly longer questionnaire was sent by mail to a cross section of college graduates. Results from this survey, when printed below, are indicated by an asterisk (*).

The American people have always been enthusiastic for education—and, as the current Survey shows, they still are. So gusty is their approval of the colleges and anything a college may undertake that they are undiscriminating in many matters that divide educators. Only in one great academic debate does the public take sides: what is a college education for? It should be designed, says the public, to fit a person for an occupation.

The questions and answers follow. In reading the figures it should be remembered that in surveys on most subjects 60 percent is a thumping majority, and that when "don't know" answers exceed 20 percent, 40 to 50 percent may be a substantial plurality.

Do you think there are many or only a few young people who are capable of going through college but don't go because they cannot afford to?

	Many	Only a Few	Don't Know
Total Regular Survey	66.5%	26.9%	6.6%
Attended grade school	71.7	18.6	9.7
Attended high school	69.1	25.7	5.2
Attended college	56.3	40.6	3.1
College graduates*	50.9	44.0	5.1

Yet in spite of the closely divided graduate opinion, a big majority of the general public believe that many who could benefit by college do not get the chance.

Who should pay for that chance?

Do you think that (the following) should or should not contribute money to colleges so that they can admit young people who cannot afford to pay the full cost themselves?

	Should contribute	Should not	Don't know
The national government			
Total Regular Survey	64.8%	24.7%	10.5%
Attended grade school	68.1	16.5	15.4
Attended high school	66.5	25.2	8.3
Attended college	58.6	35.3	6.1
College graduates*	40.2	43.1	16.7
State governments			
Total Regular Survey	69.2	18.9	11.9
Private individuals with money			
Total Regular Survey	80.8	8.9	10.3

On state governments and private individuals as sources of scholarship funds all groups are in substantial agreement. But the national government in the role of collegiate angel, as may be seen above, is viewed with increasing alarm as the educational scale is mounted, until among college graduates a bare plurality would bar it from sponsorship of needy students. This may be a case of anti-New Dealism rather than a matter of immutable principle, for a majority of college graduates have Republican sympathies; but it may also indicate that the more people are educated, the more they tend to resist the advance of statism.

To find out what people believed to be purpose of a college education,

(Continued on Cover 3)

(Continued From Cover 4)

a card with eight items on it was presented to all those interviewed. Majorities felt that five of the items were "very important," but when respondents were asked to go over the list a second time to give a "most important" rating, only one item stood out, only one other made a showing. The items, with the questions, are given below in the order in which they were finally ranked.

People have different ideas about what they want their children to get out of college. Which of these things would you rate as very important for a son of yours to get out of college, if he were to go, and which would you rate as not so important?

(Card shown to respondent.)

Now which one or two of these things you feel are very important would you consider most important for a son of yours to get out of college? (See table below).

As to first place in the public mind among the purposes of college there can be no question. Vocational training wins hands down, and the second choice—ability to get along with people—can almost certainly be interpreted as meaning a vocational asset. The two highly practical purposes together account for 87.1 percent of the "very important" vote. The three loftier but somewhat vaguer purposes—citizenship, clear thinking, and moral growth—together account for only 41.5 percent of the "most important" vote. Those who had attended college gave more weight than did the others to ability to get along with people and to think logically, gave less value to factual information.

College graduates alone were asked to rate the things they had liked best in their own college experiences. The ratings of "very important" were:

Class discussions	72.1
Books	72.4
Informal discussions with students	69.2
Personal contacts with faculty	67.2
Independent work such as essays, etc.	66.1
Class lectures by professors	56.6
Gainful work during vacations	56.6
Extracurricular activities	52.2
Events, such as lectures, etc.	49.1
Gainful work while in residence	34.1
Club or fraternity association	33.1

	Very important also most important	Very important but not most important	Very important (Total of cols. 1 & 2)	Not so important	Do kn
Training to fit him for a specific occupation or profession	53.6%	33.0%	86.6%	10.0%	3.4
Ability to get along with and understand people	33.5	54.2	87.7	9.1	3.2
Desire and ability to be a more useful citizen	17.7	67.9	85.6	11.3	3.1
Ability to think more logically	13.8	68.0	81.8	12.1	6.1
Moral growth	10.0	64.8	74.8	17.6	7.6
The advantage of being recognized as a college man	2.8	31.4	34.2	60.9	4.9
A large amount of factual information	2.2	41.1	43.3	45.4	11.3
A better appreciation of such things as literature, art and music	1.9	44.1	46.0	47.7	6.3